

# PHYSICAL WELL-BEING OF FOUR-YEAR-OLD LEARNERS AND THEIR READINESS FOR GRADE R

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**Educational Psychology** 

**School of Education** 

**South Africa** 

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#### DECLARATION

I, Ngami Phumzile Isabella Pewa declare that:

(i) The research reported in this dissertation/ thesis, except where otherwise indicated, is my original work.

(ii) This thesis has not been submitted for any degree or examination at any other university.

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L Signed.

Ngami Phumzile Isabella Pewa Date: 06/03/2023

As the candidate's supervisor, I agree to the submission of this thesis.

Signed:

Dr. Jabulile Mzimela Date: 06/03/2023

### ABSTRACT

Early childhood is a formative period during which distinguishable development has projections of bearing desirable outcomes within an individual. This critical period requires interventions that have ramifications for later life. This research study aimed at exploring physical well-being of four-year-old learners in relation to their readiness for Grade R. The study was particularly interested in their level of independence when carrying out certain physical activities. It also aimed at critically analysing the issues which enabled or constrained their physical well-being as well as early childhood development practitioners' level of readiness to plan for indoor and outdoor physical activities. The study examined the use of both fine and gross motor skills in a learning environment. Bronfenbrenner's ecological systems theory underpinned this study to understand the different environments in which a developing child finds himself/herself. It was conducted in an early childhood development centre located in Mandlankala, an area near Empangeni, north of Zululand, KwaZulu-Natal, South Africa. Three early childhood development practitioners who fit the criteria and attributes of the study were purposively selected. An interpretivist qualitative case study methodological design was used. Findings revealed that learners experience challenges in toileting, thorough washing of hands and putting shoes on and off. Centrally important for the thesis was the crafting of a conceptual model that relates the objectives of the study to the findings and conceptual issues at stake in self-care skills in Grade R. This study concluded that physical well-being is a determinant of Grade R readiness as it acts as a precursor for self-care related activities. This study recommends that early childhood development practitioners should continue to offer both structured and unstructured physical activities throughout the day in their engagement. More parental involvement is needed so that good self-care skills can modelled and emulated from home.

**Keywords:** Bronfenbrenner's Ecological Systems Theory, Early Childhood Development, Grade R, Parental Involvement, Physical Well-being, Self-care

## DEDICATION

I dedicate this thesis to my paternal grandmother, Patty Bizani Pewa (uMaNgiba) who did well by sending her children to school so that we could all see the light.

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# ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Treatment
CAPS	Curriculum and Assessment Policy Statement
CDG	Care Dependency Grant
СЕО	Chief Executive Officer
CSG	Child Support Grant
CSDH	Commission on Social Determinates of Health
DA	Democratic Alliance
DBE	Department of Basic Education
DG	Disability Grant
DHET	Department of Higher Education and Training
DoE	Department of Education
DBE	Department of Basic Education
DPME	Department of Performance Monitoring and Evaluation
DSD	Department of Social Development
ECCE	Early Childhood Care and Education
ECD	Early Childhood Development
ECE	Early Childhood Education
ECEC	Early Childhood Education and Care
ELDA	Early Learning and Development Areas
EU	The European Union

FCG	Foster Child Grant
HIV	Human Immunodeficiency Virus
ILO	The International Labour Organization
MEC	Member of Executive Council
MRQECCE	Minimum Requirements for Programmes Leading to
	Qualifications in Higher Education for Early Childhood
	Development Educators
NCF	National Curriculum Framework
NCF	National Curriculum Framework
NDA	National Development Agency
NDP	National Development Plan
NECDA	National Early Childhood Development Alliance
NELDS	National Early Learning and Development Standards
NGOs	Non-Government Organizations
NPC	National Planning Commission
NQF	National Qualifications Framework
OAS	The Organization of American States.
OECD	Organisation for Economic Co-operation and Development
PrEP	Pre-Exposure Prophylaxis
SACE	South African Council for Educators
SONA	State of the Nation Address
SDG	Sustainable Development Goals
SES	Socio-economic status
TREE	Training and Resources in Early Education
UWASP	UMhlathuze Water Stewardship Partnership

UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organisation

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#### **CHAPTER ONE**

#### SETTING THE SCENE

#### **1.1 INTRODUCTION**

In recent years, there has been a rise in the number of studies which focused on the general well-being of children (Pannilage, 2017; Savahl, Casas & Adams, 2017; Lebrun-Harris, Ghandour, Kogan & Warren, 2022). Yet as a teacher in the foundation phase (FP), I have observed the importance of physical well-being and motor skills as they form part of daily activities in a formal learning environment in addition to mental soundness and social wellness. Literature reveals that this type of well-being of learners may be associated with motor skills as these are influencing factors of cognitive skills and academic achievement in the early years (Alvarez-Bueno et al., 2017). Internationally, physical skills are designated within the measures for a learner to be school ready (United Kingdom Department of Education, 2020). This study, as embedded in Early Childhood Development (ECD) context, examines the physical well-being of four-year-old learners in relation to their readiness for Grade R. ECD is officially defined as "an umbrella term that applies to the processes by which children from birth to about 9 years grow and thrive physically, mentally, emotionally, spiritually, morally and socially" (The South African National Curriculum Framework for Children from Birth to Four, 2015, p.78).

In a nutshell, the thesis will attempt to contribute to ECD by exploring the school readiness of four-year-old learners pertaining to their physical well-being in a rural area of Mandlankala in northern Zululand. This first chapter gives an overview of the study by exploring the background to the study, rationale, problem statement, research questions, objectives of the study, significance of the study, literature review, theoretical framework, location of the study, research methods, ethical considerations, trustworthiness and chapter division of the study.

#### **1.2 BACKGROUND OF THE STUDY**

Early childhood is a formative period during which distinguishable development has projections of bearing desirable outcomes within an individual. This critical period requires interventions that have ramifications for later life. The maturity age for these much-desired interventions is in the ECD stage. The sensitivity and critical implications of early childhood years are reinforced by the understanding that it is during this pertinent era in life that cognitive, social, emotional, linguistic and many other development skills are established (Sun et al., 2017). To support the primacy of early learning, the National Development Plan (2012) recognised ECD as "a top priority among the measures to improve the quality of education and long-term prospects of future generations" (National Planning Commission 2013, p.71). The aim of this programme was to expose at least 75% of South Africa's four and five-year-old learners to formal Early Childhood Care and Education (ECCE) by 2024 (Kotzé, 2015).

The purpose of this study was to examine the physical well-being of four-year-old learners in relation to their readiness for Grade R. In this study, the four-year-old learners are in a pre-Grade R programme. Pekdoğan and Akgül (2017) and Rahmawati, Tairas and Nawangrasi (2018) associate school readiness with the attainment of specific abilities that are required for success in this phase. As noted by the NCF (DBE, 2015), Rimm-Kaufman (2017) declare physical well-being as a priority. Learning to hold a pencil and to write properly are perfect examples of the acquisition of abilities that are needed in a school environment. Handwriting is a complex skill that develops over time. Annadale (2019, p.18) states that "In order for the young child to become ready to master formal handwriting, certain pre-handwriting skills need to be mastered initially. These skills include a correct pencil grip; drawing, writing, copying and colouring". To learn handwriting, children need to combine fine motor skills, language, memory and concentration. They also need to practise and follow instructions. Handwriting starts with scribbling and drawing then moves on to forming letters and words. Annadale (2019, p. 3259) further states that "Pre-writing shapes provide the formation strokes of most letters. These strokes are age specific and are usually achieved in this specific order.", the pencil is held in its wholeness as it is wrapped in the hand. As the child develops, the grasp becomes more flexible until it reaches a trivet position. However, most school-going children are still challenged in terms of handwriting (Bingham & Snapp-Childs, 2019). This is supported by McMaster and Roberts (2016) as well as who posit that internationally, handwriting remains a main occupation for children in the classroom in the 21st century. Nightingale holds a similar view et al. (2022, p.1) suggest that "Handwriting is a primary occupation of children as it is central to performance in written expression and remains the main mode of writing in the classroom and assessment across primary and secondary schools".

This is affirmed by Zara (2017, p.1) as illustrated in Figure 1.1 below:



**Figure 1.1:** Expected movement of attaining the tripod pencil clutch **Source:** Zara (2017, p.1)

This study affirms that learners need to have both their fine and gross motor skills enhanced to be ready for Grade R. In particular, the way the small muscles in a learner's hand, fingers and wrists work together to enable a learner to do important tasks like writing and eating is known as fine motor skills (Brown, 2010; Carlson et al., 2013). The expectation is that the fine motor skills of four-year-old learners grow rapidly as Gidion (2020, p. 314) states that "the fine motor coordination of four-year-olds is on the rise and becomes more precise when performing fine motor activities, with the hands, arms, and body moving together under the better command of the eye". The movement of larger body parts, gross motor skills, is also instrumental in the physical development of a learner. Sutapa et al. (2021, p.3) state that "gross motor skills include locomotor, object control, and balance skills". Once learners have acquired the abovementioned skills, they become ready to participate in a learning environment actively and meaningfully. As this study motivates, enhancing physical well-being speaks to consecutive learning skills. Basic skills which are acquired in ECE such as literacy and numeracy have constructive results on marginalised populations as they have important implications for secondary and higher education. In South Africa, the level of literacy is low. In 2019, the adult illiteracy rate was 12%, showing an improvement of 7.1% since 2009. However, it is unimpressive that 4.4 million adults in South Africa are still illiterate (Khuluvhe, 2021). South Africa's illiteracy rate is not far ahead of the global average of 14% (UNESCO Institute of Statistics). This is, therefore, a matter of concern. The level of numeracy is also low as "South African school children have demonstrated poor academic outcomes and levels of performance in mathematics" (Spaull & Kotze, 2015; Aunio et al., 2016, p.4). According to UNESCO, if all learners in low-income countries had simply basic reading skills, an estimated 171 million people could escape extreme poverty. The White Paper for Post-School Education and Training (DHET, 2013, p.5) asserts that "Education has been recognised as proving a route out of poverty for individuals, and as a way of promoting equality of opportunity. The achievement of greater social justice is heavily dependent on equitable access by all sections of the population to quality education." Although there are various entangled causes of poverty that cannot be reversed by means of a single method, education plays a meaningful role in eliminating extreme poverty (Oranga et al., 2020; Yong & Zhang, 2021). This sentiment is also held by the President of the Republic of South Africa who stated that "If we are to break the cycle of poverty, we need to educate the children of the poor." - President Mr Cyril Ramaphosa, SONA 2018. Educating children is a huge investment in every society. Through education, children get to experience improved livelihoods and eradicate poverty which has been transmitted from generation to generation. All this improvement in the lives of children emanates from effective ECD programmes which form a solid foundation for teaching and learning (Ashley-Cooper et al., 2019).

Interventions that are children-related rarely evoke controversy because it is in the interest of everyone to improve the well-being of every child and society's standard of living. The environment in which children grow up also plays a role in their development. Those that are taken diligent care of and living within favourable environments with full access to basic essentials, are more likely to live an acceptable standard of life than those who are not (Consultative Group on Early Childhood Care and Development, 2013; UNESCO 2015). Yet a lot of South African children live in impoverished conditions. According to StatsSA (RSA, 2020), "more than six out of ten children (62,1%) are identified as multidimensionally poor".

In presenting the Imam Abdullah Haron Education Trust Memorial Lecture, Atmore (2019) states that "in order to overcome poverty and inequality in the most effective way, South Africa needs a much greater investment in early childhood development" [On Wednesday 25 September 2019]. on has been given to ECD because it brings together all aspects of social, emotional, physical and cognitive development from conception until the age of nine, (DoE,

2001). Moreover, more children now have "access to safe, accessible and high-quality ECD programmes that include a developmentally appropriate curriculum" (Kwatubana, 2014, p. 506).

#### **1.3 WELL-BEING IN EARLY CHILDHOOD**

In the South African context, the well-being of children has occupied a central position in ECD to enhance the quality of life of children. Positive life trajectories of children are framed by policies and programmes that speak to the well-being of children. According to the National Curriculum Framework for children from Birth to Four policy (DBE, 2015), well-being is one of the six Early Learning and Development Areas (ELDAs), the other five being identity and belonging, communication, exploring mathematics, creativity and knowledge and understanding of the world. Moreover, well-being is at the top the list because it entails fundamental life skills. Well-being is, therefore, the backbone of ELDAs that forms foundation for the other five. Without well-being, all other Early Learning and Development Areas would fall apart (National Curriculum Framework for children from Birth to Four, 2015).

The well-being of a child is of paramount importance to himself/herself, his/her parents and his/her caregivers. The importance of family relationships and interactions is emphasised by Bowes, Watson and Pearson (2009) who suggest that quality parenting contributes optimal health and the well-being of children (Newland, 2015; Breiner, Fords, & Gadsden, 2016). Well-being is a broad concept that constitutes physical vitality, cognitive ability, emotional steadiness and social composure. These components of well-being are interrelated. This is supported by Grissmer, Grimm, Aiyer, Murrah and Steele (2010a) who postulate that a certain part in the brain that controls the learning process during motor development is also involved in the control of learning in cognitive development (Grissmer et al., 2010a). The cerebellum plays a pivotal role in voluntary control of limb movements, ocular motor control, balance, walking, and non-motor higher cognitive functions (Salman & Tsai, 2016). "The evidence of the impact of motor skills on cognitive development and readiness for school calls for a shift in curricula to include activities that focus on fine motor skills, and to include the arts, physical education, and play" (Grissmer et al., 2010b, p.154; Institute of Medicine and National Research Council, 2015).

One cannot divorce physical health from cognitive ability, emotional stability and social soundness (Boehm & Kubzansky, 2012; Ryff, Singer, & Love, 2004). Physical well-being is about good health and possessing enough energy to conduct necessary activities thus becoming emotionally and socially stable. The interrelatedness of the three is supported by the World Health Organisation (WHO) which defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (Hernandez et al., 2017). This total stability in the life of a child translates to school readiness.

#### **1.4 RATIONALE OF THE STUDY**

It is important for pre-Grade R practitioners to pay attention to the development of the physical well-being of four-year-old learners to get them ready for Grade R. The basis of this study is founded on an assertion that four-year-old learners should be physically ready to conduct activities that promote their independence and self-sufficiency in Grade R. This is supported by Amod and Heafield (2013) who state that readiness for school entry should focus on physical development and cognitive skills, amongst other things. In South Africa, Grade R is also referred to as Reception Year. It is the year of formal schooling for four-year-old learners before Grade 1 that prepares them for formal schooling (van Rensburg, 2015). It is part of the Foundation Phase where there are structured classes, and a formal curriculum is followed according to CAPS. Grade R focuses on three learning areas. These are Language, Mathematics and Life Skills. As Grade R presents a formal learning environment, it requires learners to be able to sit still and pay attention. If learners display immature motor skills, they will not be able to sit still or hold a pencil for that matter. Dinehart and Manfra (2013) and Graham and Santangelo (2012) are of the view that the ability to hold a pen is connected to handwriting which is a very necessary skill in a formal classroom setting. More literature suggests that writing by hand in the early years supports the development of reading skills (Longcamp et al. 2005; James & Engelhardt, 2012). According to Curriculum and Assessment Policy Statements (CAPS), the development of learners' gross and fine motor skills is fundamental in the FP (DBE, 2011).

This study also supports the view that homes should be ready to support the four-year-old learners. Family is the nearest environment to the developing child and prior to entering school, it is the most important context for development. Kokkalia et al. (2019, p.5) put an emphasis on the "ability of the family and community to support optimal early child development". The

thesis justifies that a family environment needs to take its firm position and play its significant role in terms of readying a child for a formal school setting.

With reference to school readiness, family is understood as "those members who co-reside with the young children, including biological and non-biological caregivers, siblings and extended family members" (UNICEF, 2012, p.13). Gunindi et al. (2012) state that family lays a bridge for the child to be part of society and life. Supportive parenting and stimulating home environments have been shown to be among the strongest predictors of school performance during primary school and beyond (Whiting & Edwards, 1988; Werner & Smith, 2001; Burchinal et al., 2002; Rogoff, 2003; Richter, 2004; Bradley & Corwyn, 2005). Although the school readiness literature typically focuses on a couple of years prior to primary school entry, families should prepare their children for formal education from the onset.

This study rationalises that ECD centres should be ready to provide four-year-old learners with resources that nurture their physical well-being. The environment at school should be conducive so that learners do not find transition from home to school uneven. This transition is one of the most important milestones in the development of young children (Wildenger & McIntyre, 2012; Nieuwenhuizen, Eloff, & Moen, 2014; Maphiri, 2017). Schools' readiness for children is defined in terms of the features of the school environment that favours even transition for children into formal schooling settings and advance learning for all children (Pianta & Kraft-Sayre, 2003).

#### **1.5 PROBLEM STATEMENT**

In South Africa, numerous learners of school-going age are not ready for formal education (Bruwer et al., 2014; Janse van Rensburg, 2015; Yzel, 2017). Van Zyl (2012) cautions that these learners stand a great chance of struggling to adjust. The struggle is caused by lack of smooth transition from a pre-school setting to a more formal school environment. This maladjustment is a derivative of a turbulence amongst various forms of well-being. The struggle to adjust by learners will affect their academic performance negatively. To combat this, the well-being of learners requires proper and professional nurturing. Failure to nurture well-being is related to a greater chance of extensive variety of life-long problems. These wide-ranging problems include but not limited to impaired cognitive development (De Jong, 2010; McLean & McDougall, 2014; McLean et al., 2014; Zilberstein & Popper, 2014), school under-achievement (Barreau et al., 2008; Goodman & Gregg, 2010) and other social ills like drug abuse and teenage pregnancy.

These social ills produce poor social fibre that subsequently results in an instable economic state for the country.

Therefore, well-being is a moral prerequisite for school readiness so that learners, including those from rural and disadvantaged communities, start school on the same footing to achieve to the best of their ability. The South African Early Childhood Review (2017) reveals stark inequalities that exist across the country, with children being exposed to considerable variation in the delivery of essential services based on the area in which they live (Hall et al. 2017). Education is one of such services; the absence of which could lead to serious long-term consequences in the well-being, academic ability and earning potential of South African children (Hall et al. 2017). Based on the supposition that rural communities in South Africa have been comparatively disadvantaged, "the provision of ECD services to rural communities may lead to higher achievement scores, completion rate in subsequent years of schooling, and reduce criminal activities" (Kamara et al., 2018, p.1). It is, therefore, imperative that ECD should start as early as possible and include all aspects of child development so as to equip the child for smooth transition into formal school setting. Stimulation of children needs to start as early as possible, with various activities such as reading, talking, singing and playing with them. Gradually, young children develop their language, motor, social, literacy and numeracy skills, and numerous other competencies, including physical activity (Chi & Kim, 2016).

#### **1.6 OBJECTIVES OF THE STUDY**

The objectives of this study were to:

- i. Understand the nature of practices ECD practitioners employ to enhance the physical well-being of four-year-old learners' readiness for Grade R.
- ii. Determine the extent to which the ECD centre promotes the physical well-being of four-year-old learners for their readiness for Grade R.
- iii. Examine the extent to which ECD practitioners are pedagogically prepared to plan for the physical activities for four-year-old learners' readiness for Grade R.
- iv. Comprehend ECD practitioners' strategies and approaches for preparing four-yearold learners' physical well-being and readiness for Grade R.

#### **1.7 RESEARCH QUESTIONS**

The research questions of these study were:

- i. What is the nature of practices ECD practitioners employ to enhance the physical well-being of four-year-old learners' readiness for Grade R?
- ii. How does the ECD Centre promote the physical well-being of four-year-old learners for their readiness for Grade R?
- iii. How are ECD practitioners pedagogically prepared to plan for the physical activities for four-year-old learners' readiness for Grade R?
- iv. Why do ECD practitioners prepare four-year-old learners' physical well-being and readiness for Grade R in the manner they do?

#### **1.8 THE SIGNIFICANCE OF THE STUDY**

South Africa has realised the beneficial effects of ECD programmes on learners such as excellent academic performance. The flourishing performance of learners because of sound ECD programmes is expected throughout the country. However, Fourie (2013) is of belief that poor children, in particular, benefit significantly from quality ECD interventions in terms of school readiness and achievement (Atmore et al., 2012; Atinc & Gustafsson-Wright, 2013; Bakken, Brown & Downing 2017). Nevertheless, conducting research in rural communities brings about social justice that is hindered by isolation and marginalisation practices which have invaded South Africa and many other societies around the world for the longest of time (Hlalele, 2012; Roberts, 2016; Acharya, 2018). If research is done and proper feedback in given, ECD centres in rural areas will have guidance on how to provide this much-needed quality of physical well-being. The primary beneficiaries of the study will be learners in rural childhood care and education centres through policy making. Findings and recommendations will be implemented based on the decisions of policy makers. If learners' well-being is taken care of, they will evolve and become well-rounded citizens of our country. The value of well-being in ECD will bear satisfactory results for children, families, communities and society. On the other hand, family relationships play a central role in shaping an individual's well-being across the life course (Merz et al., 2009). Besides social, economic and educational benefits, there will be positive influence on individual lives and on the welfare of communities (Atmore, 2009). This may result in positive outcomes such as better health status, more satisfactory social relationships, higher productivity and increased educational achievements. International and local researchers as well as local and provincial governments will benefit from the study.

#### **1.9 REVIEW OF LITERATURE**

Pollard and Lee (2003) point out that a systematic review of the child's well-being literature should be conducted by looking at the definition of well-being, the domains of well-being, the indicators of well-being and measurement of well-being.

Well-being is the overall wellness of a person. The definition of well-being is relative across different domains. In health sciences, well-being could mean absence of diseases while in education it could be a person's ability to interact with others, perform certain skills, feelings of happiness, confidence and satisfaction with self (Sfeatcu et al., 2014). The multidimensional concept of well-being can be structured into two domains: hedonic and eudemonic (Ryff et al., 2004; Deci & Ryan, 2008; Winefield et al., 2012). Hedonic well-being includes such traits as pleasure, happiness, positive affect, and life satisfaction, whereas eudemonic well-being includes life meaning and purpose, self-actualisation, and autonomy (Deci & Ryan, 2008). Although doubting stance questions the degree of eloquent partitioning across well-being domains (Kashdan et al., 2008), there is proof that while hedonic and eudemonic aspects of well-being are correlated, they deviate and draw onto empirically separate planes, with dissimilar indicators and consequences (Keyes et al., 2002). While learners perform activities, which are intended to make them physically ready for Grade R, they may experience pleasure, enjoyment and fun. Moreover, they may gain a sense of purpose, independence and self-actualisation.

There is an urgent need to investigate physical well-being at the ECD level because it is the cornerstone of general wellness and school readiness. According to Mashburn and Pianta (2006, p.152), school readiness can be understood as "how a learner can effectively engage independently in the social environment". It is characterised by the ability of learners to withstand the demands and expectations of the schooling system. This ability includes but is not limited to physical vitality that is required to perform certain tasks as prescribed by the education policies. Rahmawati et al., (2018) and Doherty (2007) state that school readiness falls into several domains that include a learner's physical health and well-being. The ability to conduct daily activities accelerates to school readiness. According to the United Nations Children's Foundation (UNICEF), a child who is ready for school is one who has acquired the basic minimum skills and knowledge in a variety of domains that will enable the child to be successful in school.

School readiness of four-year old learners for Grade R would mean many things that learners can do without assistance from an older person. It may include is but not confined to independence when toileting, the ability to dress and tying up shoelaces. Daily-Diamond, Gregg and O'Reilly (2017) state that the untying of shoelaces can occur unintentionally and without any cautioning. The tying requires the intentional and conscious movement of hands and fingers. The importance of school readiness in the Foundation Phase, cannot be overemphasised (Esterhuizen & Grosser, 2014). Fitzpatrick (2014, p.157) affirms that school readiness is of utmost importance when adapting to formal learning because it prevents poor academic achievement, which can further cause learners to drop out of school, become unemployed, engage in delinquent activities and even contract health problems.

Thus, school readiness is deemed to be advantageous for a country because it minimises the chances of a society contracting social ills, and it equips learners with a head start opportunity to engage better in learning. If children participate in early learning, it enhances their ability to succeed academically (Shaul & Schwartz, 2014, p.753). In the last few years, school readiness has been brought to the forefront of ECE policy. This is supported by Kay (2018, p. 327) who states that "the 'school-readiness' agenda is becoming increasingly dominant in recent policy discourse". Pascal et al. (2017, p.6) argue that this increased prominence and the "accompanying *schoolification* of early years' pedagogy," are political actions that reflect a shift in beliefs about the purpose of ECE within policy making.

Fitzgerald (2020) and Allen and Kelly (2015) state that while there are normal developmental milestones that children often reach at similar ages and stages, all children are different. They learn and develop at their own pace. Learners may not all show signs of all aspects of school readiness (Darling-Hammond et al., 2020) It is, therefore, the duty of practitioners to be aware of these aspects of school readiness and subsequently make sure that learners get developed in areas where they show signs of weakness.

Chin-Kai Lin et al. (2014) postulate that it is the duty of the practitioner to provide motoric tasks that would help improve learners' abilities in the academic field. This is where the pedagogical preparedness of ECD practitioners comes in. Literature reviewed suggests that ECD practitioners should be qualified to perform their duties and continuously receive training throughout their careers. Nutbrown (2012) states that in South Africa, the present ECD curriculum does not support and enhance professional development of ECD practitioners

throughout their careers. Yet, Foster (2016) stresses the importance of ongoing professional development of ECE professionals as it allows them to share, network and remain current in the field.

The National Early Learning and Development Standards (NELDS, 2009) classify children from birth to four years into babies (0-18 months), toddlers (18- 36 months) and young children (3-4 years). Children in each category need to develop physical skills to cope with the demands of life. Children go through similar stages of development at about the same time but do not necessarily do this at the same pace. Grade R learners are usually 5 years of age and there are general expectations in terms of their development and growth. Table 1.1 below presents general development expectations from a five-year-old:

**TABLE 1.1:** General development expectations from five- year-old learners/children**Source:** Adapted from Facts for Life: How Children Develop, 4<sup>th</sup> Edition (2010)

BY THE AGE OF 5 YEARS	
A child should be able to:	Co-ordination
	move in a coordinated way
	speak in sentences and use many
	different words
	Understands opposites (e.g., fat and
	thin, tall and short)
	Play with other children
	Dress without help
	Answer simple questions
	Count 5-10 objects



Well-being refers to intertwined domains of physical, mental and social wellness. Well-being is, therefore, multifaceted and its interwoven nature has been dealt with in several studies (Horton & Snyder, 2009; Statham & Chase, 2010; Atkinson et al., 2019). It includes choices aimed at achieving self-actualisation, a sense of accomplishment and personal fulfilment and is about physical verve, mental promptness and social contentment. Social and mental wellness is dependent on physical vitality (Salama-Younes, 2011; Summers et al., 2012; Fernández-Abascal & Martín-Díaz, 2015). You cannot divorce physical health from emotional stability and social soundness. Physical well-being is about good health and possessing enough energy to conduct necessary activities thus becoming emotionally and socially stable. The interrelatedness of the three is supported by the World Health Organisation (WHO) which defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Initially, the well-being of children had been measured through basic needs such as immunisation, school enrolment and infant mortality rates (Ben-Arieh et al., 2015). At first, this measurement was based on child survival rather than life prosperity. More recently, there has been a positive shift to the development of measures. New ways of exploring and measuring a child's well-being has been established (Hanmer et al., 2010). The findings from the Childhood as a Social Phenomenon project provided a shift in indicators of a child's well-being by focusing on positive measures which deal with flourishing the child rather than negative measures such as abnormality and perilous behaviours (Ben-Arieh et al., 2013).

#### **1.10 THEORETICAL FRAMEWORK**

While trying to establish which theoretical framework to underpin this study, I had to examine the topic of the study as well as the research questions. This is supported by Grant and Osanloo (2015, p.17) who state that to select an appropriate theoretical framework, a researcher "requires a deep and thoughtful understanding of your problem, purpose, significance, and research questions". This study is underpinned by Bronfenbrenner's ecological systems theory. In Chapter 3 of this study, an in-depth discussion of the theory is presented.

#### **1.11 LOCATION OF THE STUDY**

South Africa is one of the most unequal countries in the world (The World Bank, 2018; Francis & Webster, 2019; Hundenborn et al., 2019). Scott (2019) of CNN World cites Ndlovu (Oxfam South Africa's democracy and governance manager) who asserts that inequality has been aggravated because of "systemic failures at a government level." It is further stated that it is not just income inequality that is cause for concern but also unequal access to opportunities and essential public services (Bhorat et al., 2009; Sardokie & Adams, 2020) as well as "inequality pertaining to access to education, health, basic services…" (Statistics South Africa, 2019, p.71).

Poverty is spread unevenly throughout the nine provinces of South Africa; most poor children are Blacks predominantly living in rural KwaZulu-Natal, Limpopo and the Eastern Cape (Mid-Year Population Estimates, 2014). Although "KwaZulu-Natal drove the reduction in poverty rates between 2006 and 2015, rural areas have the highest poverty concentration" (The World Bank, 2018, p.16-17). The impact of apartheid cannot be ignored in this regard because "the provinces with the highest average propensity to poverty are KwaZulu-Natal, Eastern Cape, and Limpopo. The legacy of apartheid still endures because these provinces contain most of the former Bantustans" (The World Bank, 2018, p. 37).

#### 1.11.1 Where the study was located?

This study was conducted in KwaZulu-Natal at an ECD centre in Mandlankala. Mandlankala is an area which is located near Empangeni in the north of Zululand. It is in the southeast region of Umhlathuze Local Municipality Ward 12 and is a rural area. Mandlankala Reserve is found on the northern outskirts of Esikhawini, a township which has been recently renamed Esikhaleni. Figure 1.2 below gives a snapshot of the Mandlankala reserve and its population.



Country	South Africa
Province	KwaZulu-Natal
District	King Cetshwayo
Municipality	uMhlathuze
Area	
• Total	5.90 km <sup>2</sup> (2.28 sq mi)
Population	
(2012)	
• Total	32,437
• Density	5,500/km <sup>2</sup> (14,000/sq mi)
Racial makeup (2001)	
[1]	

Black African	99.8%
• Coloured	0.1%
First languages (2001)	
• Zulu	98.5%
Time zone	UTC+2 (SAST)



The purposiveness of the location was used to achieve documentation and collection of material which is rich and informed the phenomenon of interest profoundly. There is a high rate of unemployment in the area. Learners in this ECD centre come from low-income homes. As a result, they may not be properly catered for in terms of their primary needs. Malnutrition and ill-health, including lack of physical well-being, are associated with socio-economic factors and can damage the cognitive processing ability of children. "Implementation of early childhood education may prove critical especially in low-income countries" (Compton, 2019, p.112) and homes. Although the Departments of Social Development, Health and Basic Education have become conscious of the prerequisite for the development of remarkable ECD programmes and for greater than before access to such programmes (Brink, 2016), Van Niekerk et al. (2017) posit that ECD centres and programmes are still not evenly and well distributed. Many ECD centres are in urban communities and not enough in rural areas. They further state that many of the ECD centres located in rural communities are of an inferior quality and do not have access to resources that are needed by children such as health clinics, nutrition programmes, speech therapists, occupational therapists and physiotherapists.

# 1.12 THE SYNOPSIS PRESENTATION OF RESEARCH DESIGN AND METHODOLODY

#### 1.12.1 Design of the Study (Research Approach, Paradigm and Methodological Design)

In a nutshell, I want to argue through literature that quantitative data is about quantities and measurements, whilst qualitative data (such as human behaviour), is non-numerical (Daniel, 2016; McLeod, 2019; Noyes et al., 2019). This study was designed as a qualitative research which is primarily investigative in nature. Qualitative research is exploratory and therefore, fact finding in nature. This type of research studied the behaviour of the target group, and the results were descriptive. Qualitative researchers often view human behaviour as being "fluid, dynamic and changing over time and place" (Antwi & Hamza, 2015, p.221). This means that qualitative researchers study things in their "natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings" people bring to them (Denzin & Lincoln, 2005, p.3; Aspers & Corte, 2019). They are usually not interested in generalising beyond the particular people who are studied (Johnson & Christensen, 2011).

This was meaningful in my study because I examined the behaviour of four-year-old learners in their familiar setting, surrounded by well-acquainted faces of their peers and ECD practitioners.

The nature of this study required the use of the qualitative research approach to elicit information from participants.

According to Babbie and Mouton (2006), there are three main research approaches:

- the qualitative approach, which is related to phenomenology or interpretivism,
- the quantitative approach, which is related to positivism, and
- the participatory research, which is related to the critical paradigm in metatheory.

For the purpose of fulfilling the objectives of the study and understanding the trajectory emanating from the research problem, I used a qualitative approach. Although qualitative research is not an easy term to define (Ritchie et al., 2013), qualitative methods are best for describing, interpreting, contextualising, and gaining in-depth insight into specific concepts or phenomena (Mc Combes, 2019). Qualitative research is used to gain an understanding of underlying reasons, opinions, and motivations and will provide insight into the problem and help to develop ideas or hypotheses for further research. Qualitative research data generation methods are time consuming, therefore data is usually generated from a smaller sample than would be the case for quantitative approaches. Although this type of research is time

consuming, its benefit is that the information is richer and has a deeper insight into the phenomenon under study. Qualitative research takes a closer look at human experience by means of organised approaches (Burns & Grove, 2007).

This study adopted a case study methodological design. Rule and John (2011, p.4) define a case study as "a systematic and in-depth investigation of a particular instance in its context in order to generate knowledge". I spent an extensive period with learners, observing and recording their behaviour as four-year-old learners, thus the sampled ECD teachers' engagement with these learners was explored in depth.

A paradigm is a certain way a researcher will use to perceive the study. It is a mental window through which a researcher is viewing the study. It is simply a perspective and a stance taken by the study. According to Thomas (2013, p.53), a paradigm is noted as "an unchanging thought that depicts the nature of a phenomenon". MacNaughton et al. (2001) explain that a research paradigm comprises three elements: a belief about the nature of knowledge, a methodology and criteria for validity. Neuman (2000) and Creswell (2003) refer to the paradigm as epistemology or ontology, or even research methodology.

I used the interpretivist paradigm since this study examined human behaviour and could not be generalised. The aim, in this instance, was to understand the actions of human beings. In this study, I aimed to understand the physical well-being of four-year-old learners in order to get them ready for Grade R and to examine practitioners' level of pedagogical preparedness to plan for physical activities. The behaviour and actions of human beings was not predicted but understood greatly. Interpretivist positions are founded on the theoretical belief that reality is socially fabricated, fluid and lacks any signs of rigidity and stringency. Thus, what we know is always negotiated within cultures, social settings, and relationship with other people.

#### 1.12.2 Sampling Method

Sampling is about making a sound decision on who you are going to interview, who your participants are going to be. Samples are drawn because "it would be impractical to investigate all members of a target population" (Brewerton & Millward, 2002, p.15). Furthermore, Henning (2004, p.85) states that sampling is "a process of selecting research participants". It is the process of choosing a part of the population to represent the whole (Naderifar et al., 2017). In this research, sampling was purposive because rural early childhood care and education centres were visited. In this research, I used my own judgement as to who my participants were going

to be, thus giving me appropriate information. Kumar (2012) refers to this type of sampling as judgemental sampling.

Participants were not a large number since this research was more focused on the details and description rather than numbers and statistics. Following the guidelines indicated by Onwuegbuzie and Collins (2007), I selected the three ECD practitioners. However, the ECD practitioners who were selected indicated other befitting ECD practitioners to take part in the study. They stated that one of the three selected practitioners were new in the profession and felt she could not make a substantial contribution to the study. These members of the population aimed at identifying a further set of relevant individuals. That would cause the sample grows in size like a rolling snowball (Welman & Kruger, 1999). This would create snowball sampling (Martínez-Mesa et al., 2016). I assured the three initially selected participants that they meet all the requirements for the study. The three selected practitioners were teaching four-year-old learners. ECD practitioners and four-year-old learners in Mandlankala area met a certain criterion. They were representatives of other learners and ECD practitioners in the KwaZulu-Natal province who work at ECD centres in rural areas. Bertram and Christiansen (2014) refer to this method as criterion sampling.

#### 1.12.3 Data Generation Methods

A naturalistic approach of gathering data was used. Naturalistic inquiry is an approach to understanding the social world in which the researcher observes, describes, and interprets the experiences and actions of specific people and groups in societal and cultural context (Armstrong, 2010). Information was, therefore, gathered by means of interviews and observations. As far as interviews were concerned, I considered research questions and research objectives pursued by the study when choosing interviews as a mode of generating qualitative data. Through the use of interviews, I wanted to understand the feelings, perceptions and experiences of participants pertaining to the physical well-being of four-year-old learners and their preparation for Grade R readiness.

According to Seabi (2012, p.91), "observation" is defined as a technique of collecting data where the researcher notices and identifies material through his or her senses. In terms of observations, I chose to take the participant observer stance. I participated in group activities as desired, yet my main role as a researcher was to collect data, and the group under scrutiny was
aware of my observation activities. The aim of observing the participants in their pedagogical practices assisted me to holistically understand the phenomenon.

### 1.12.3.1 Interviews as data generation method

Seale et al. (2004) define an interview as a social encounter where speakers collaborate in producing retrospective and prospective accounts or versions of their past or future actions, experiences, feelings and thoughts. There are three types of interviews: structured, semi-structured and unstructured (Mueller & Segal, 2015; Wethington & McDarby, 2015; Cropley, 2019). I used semi-structured interviews where I had a leading idea of what to ask a respondent. Semi-structured interviews gave the interviewer freedom and flexibility to ask relevant questions that came to mind regarding the subject and build up on what the respondent was saying. These semi-structured interviews were face-to-face, and audio recorded so that I would be able to go back to the audio tape to seek clarity where and when necessary.

### 1.12.3.2 Observations as data generation method

Litchman (2013, p.165) states that "observing humans in their natural setting assists our understanding of the complexity of human behaviour and interrelationships among groups" – this is particularly useful for empirical studies since observation assists the researcher with capturing authentic data in the participants' natural setting. I used participant observation by spending lengthy periods with four-year-old learners so as to take part in and observe what they do with the intention of reporting on observations. Qaddo (2019, p.9) states that "indeed, participant observation functions because it is believed that the participants assume that all conditions are in fact normal". This allowed me not to feel detached from learners' experiences but get first-hand information. Observations assisted me to get actual information on the matter by being present in the site and witnessing the conditions of the setting the ECD practitioners work, and learners find themselves under. The intention was to examine the physical well-being of four-year-old learners in terms of their readiness for grade R and, as a researcher, record my findings in a journal.

### **1.13 DATA ANALYSIS**

The point of entry of data analysis was to become familiar with information from interviews and observations (Grbich, 2010). I immersed myself in the research data by reading through it repeatedly (Chenail, 2012). The intention for going through data repeatedly was to obtain vivid

and descriptive information supplied by the study participants. Content analysis involves coding and classifying data, also referred to as categorising and indexing (Creswell, 2003; 2006; 2009). This means that data were systematically organised according to a certain schema so that it took a certain meaningful shape. Coding assisted to reveal relationships between categories being identified (Charmaz, 2006). I also used constant comparative method Turner et al. (2013) to verify the emerging categories and concepts. Data coding included generating categories of the dataset that have recurring patterns (Strauss & Corbin, 1998; Nowell et al., 2017). The aim of context analysis is to make sense of the data collected and to highlight the important information from the collected data.

Rule and John (2011, p.77) state that "good qualitative research would allow some codes to be brought to the data (deductive analysis) but ensure that ample room is created for the data to 'speak' and 'name' additional codes (inductive analysis)". In this study, I used the deductive approach. This approach required that I started with a theoretical framework which underpins the study. This approach is about moving from the general to the particular as suggested by Welman et al. (2007). From the theoretical framework, I developed a set of categories for classifying data. I used these categories to organise data. This is called categorisation of data. The different categories of data were defined tentatively until categorisation was complete. After this, final definition of categories of data took place. I subsequently adopted Creswell (2003); Braun and Clark (2012); and Creswell (2012) suggestions that the emerged themes have to be summarised and synthesised from the raw data as well as comparing the results to the study's research questions and existing literature on the subject.

### **1.14 ETHICAL CONSIDERATIONS**

Before conducting research, it is essential that a researcher obtains ethics approval (Morgans & Allen, 2005) although "research ethics approval processes can be bureaucratic, time-consuming and frustrating" (Newson & Lipworth, 2015, p.170). When approaching participants, it is important to go through official gatekeepers. This is because it is often only through these gatekeepers that researchers gain access to potential participants (Aluwihare-Samaranayake, 2012). Ethical behaviour simply means doing what is right. It means treating people fairly and not hurting anyone. Ethical behaviour is described as a set of moral principles, rules, or standards governing person or a profession (Lichtman, 2013). Being ethical means explaining the details of a research project and the intentions of the study to the participants before entering into fieldwork. To ensure ethical behaviour, the following factors were considered:

**1.14.1 Autonomy** refers to the right of an individual to determine what activities they will or will not participate in. Gillon (2003) states that autonomy is the ability to think, decide, and act on the basis of a freely made decision. The cornerstone of protecting autonomy is the informed consent process, whereby an investigator provides a potential research participant with full disclosure about the nature of the study, the risks, benefits and alternatives, and an extended opportunity to ask questions before deciding whether or not to participate.

**1.14.2** Non-maleficence means to "to avoid the causation of harm." In this research, participants were not harmed in any way. Extra care was taken since the study involved young learners. Lichtman (2013) makes an example of the 1971 Stanford Prison Experiment in which students played the role of guards and prisoners. When it was found that the guards became increasingly sadistic, the study was terminated. In this study, there was no sadistic behaviour as there were no activities which tormented participants.

**1.14.3 Beneficence** refers to the obligation on the part of the investigator to maximise benefits for the individual participant and/or society, while minimising risk of harm to the individual. This is suggested by Townsend et al. (2010) who reiterate that the principles of beneficence involve a commitment to afford benefits for the participants. Beneficence is action that is done for the benefit of others. Beneficent actions can be taken to help prevent or remove harms or to simply improve the situation of others. Bertram and Christiansen (2014) state that the research must have benefit, either directly to the research participants, or more broadly to other researchers or to society at large. The primary beneficiaries of this research will be learners in rural early childhood care and education centres. Presenting at national conferences and meetings of professional associations will be a way of disseminating research findings. Publishing these findings in national journals will also assist in broadcasting the importance of physical well-being of four-year-old learners in preparation for Grade R.

### 1.14.4 Participants' Consent and Identity

A fundamental ethical principle in research is that research participants have a full knowledge of the risks and benefits of their participation and freely choose to be participants. This is the foremost need for informed consent. Williamson (2007) recommends that researchers must ensure participants are fully aware of what they are getting into so that they can give an informed consent prior to participating and confidentiality should be ensured (Miller & Boulton, 2007). Participants entered into an informed consent agreement with me, signifying

their willing participation and their ethical understanding that this was educational research for which there would be no monetary rewards. It was my responsibility to explain fully and meaningfully what the research was about and how it will be disseminated.

Although there was deliberate disclosure of the location of the study, faces of participants were masked by using pseudonyms. Deductive disclosure, which is identification of participants by examining their traits and characteristics, was avoided because participants of the study were of the same level of education, same gender, almost the same age and social status. Tolich (2004) refers to this disclosure as internal confidentiality. Globally, it has been emphasised that academic research should be conducted with integrity and truthfulness.

### **1.15 TRUSTWORTHINESS**

Hogan, Dolan and Donnelly (2009) emphasise the need for researchers to remain objective by carefully examining their attitudes as these may impede the dependability of the study. This is where trustworthiness arises. Trustworthiness is regarded as the "acid test of your analysis, findings and conclusions" (Maree, 2016, p.123). This is because trustworthiness "portrays the quality of your inquiry process and product" (Schwandt, 2015, p.299). This term speaks to the authenticity and genuineness of data. It acknowledges the subjectivity of the researcher. Sinkovics et al. (2008) state that academic researchers should produce work that displays credibility, dependability, transferability and confirmability as its base. A lengthy discussion of trustworthiness of the study is presented in Chapter 4 where rigour and quality are examined (See 4.2.7).

### **1.16 CHAPTER DIVISION**

### **Chapter One**

The first chapter gives an overview of the study by exploring the background to the study, rationale, problem statement, research questions, objectives of the study, significance of the study, literature review, theoretical framework, location of the study, research methods, ethical considerations, trustworthiness and chapter division of the study.

### **Chapter Two**

Chapter 2 serves as the first of the two literature review chapters. Part one of literature review chapter presents the contextualisation of ECD sector in South Africa and looks at what the country has done since the beginning of democracy in 1994. It also examines the level of inequality in ECD provision, the role that is played by politics in the sector, internationalisation of the sector and also provides a comparison of ECD between South Africa and other developing countries. Finally, the chapter discusses some challenges facing ECD in South Africa.

### **Chapter Three**

Chapter 3 serves as a second chapter of literature review. It presents a critical review of related literature by surveying of scholarly sources relating to physical well-being and school readiness of four-year-old learners for Grade R. Studies reviewed are related to the questions of this research study and they appear in later chapters juxtaposed with the new findings of the current study. Key ideas, terms and vocabulary are unpacked. This includes work by seminal researchers and research within the field of early ECD. The state of ECD in South Africa is discussed in relation to other two developing countries.

### **Chapter Four**

Chapter 4 provides the theoretical underpinning of the study. It provides a theoretical understanding of physical well-being of four-year-old learners and their readiness for Grade R. The bio-ecological systems theory by Urie Bronfenbrenner (1979) forms the theoretical underpinning of this study. A comprehensive description of the bio-ecological systems theory is provided.

### **Chapter Five**

Chapter 5 explains the reasoning behind the approach to the research study. It elucidates the collection methods, methods of analysis, and other key points of the study. This chapter gives a detailed description of the methodology used in the study. It outlines the research methods used and this includes the research design, sampling methods and a detailed description of the data collection methods, instruments, strategies of data analysis and all the procedures that were deemed necessary for the success of the study.

### **Chapter Six**

The aim of Chapter 6 is to present research findings and analysis. The analysis is informed by the data that emanated from the semi-structured interviews, participant observations and literature review.

### **Chapter Seven**

This chapter discusses and synthesises the findings. It interprets the findings in terms of the critical research questions asked. Chapter 6 discusses research findings and connects them through the layers of detail to the overarching research questions they relate to.

### **Chapter Eight**

Chapter 8 presents methodological and personal-professional reflections on the study. It also provides an overall review of the study as guided by the four objectives. The chapter presents research findings in relation to research questions and subsequently offers corresponding recommendations and the significance of the study.

### **1.17 CHAPTER SUMMARY**

This chapter presented the study and covered the problem statement, key terms and concepts used in the study, the background to the study, and set out the research questions. It mainly included the motivation of the entire study and the plan of the whole study. This is a qualitative case study that looks at the physical well-being of four-year-old learners and their readiness for Grade R as well as the pedagogical readiness of ECD practitioners for learners' physical activities. Grade R, also referred to as Reception Year, is the year of schooling before Grade 1 that prepares children for formal schooling. It is part of the Foundation Phase where there are structured classes, and a formal curriculum is followed according to CAPS. South Africa has realised the good effects of ECD programmes on learners such as excellent academic performance. In this study, I will contribute to the conceptual issues at stake in the thesis. The next chapter provides the first part of survey of scholarly sources relating to the physical well-being and school readiness of four-year-old learners.

### **CHAPTER TWO**

### LITERATURE REVIEW (PART 1)

### LANDSCAPING THE ECD SECTOR IN SOUTH AFRICA

### **2.1 INTRODUCTION**

The previous chapter served as an introduction to the study. Its main aim was to set the scene and also present significant aspects related to this study. These included the purpose of the study, the rationale of the study, the research objectives and key research questions. This chapter serves as the first of the two literature review chapters. For ease of comprehension, the literature review chapter has two parts, thus two chapters were developed and presented. Part one of literature review chapter presents the contextualisation of ECD sector in South Africa and looks at what the country has done since the beginning of democracy in 1994. Part two of literature review chapter presents a survey of scholarly sources relating to physical well-being and school readiness of four-year-old learners for Grade R. The former part of literature review chapter also examines the level of inequality in ECD provision, the role that is played by politics in the sector, internationalisation of the sector and also provides a comparison of ECD between South Africa and other developing countries. Finally, the chapter discusses some challenges facing ECD in South Africa. The literature reviewed for the purpose of this chapter will be presented in themes. Presentation of literature in themes is supported by Cohen, Manion and Morrison (2018), who aver that presenting literature in themes assists the researcher to address the phenomenon relevantly and also address the gaps that might have been realised.

### 2.2 CONTEXTUALISATION OF THE ECD SECTOR IN SOUTH AFRICA

According to the African Charter on the Rights and Welfare of the Child, every country should develop its own comprehensive national strategies to ensure that quality services are provided for the development of its children (Viviers, 2014). This statement proposes that strategies, policies and resources must be put in place and co-ordinated to ensure successful development of the child. South Africa has an inclusive concept for the education of children from birth to nine years of age, namely ECD. It includes learners who are in pre-Grade R programmes, Grade R programmes and Foundation Phase (Grades 1–3). Scholars including Richter et al.

(2012) and Richter (2013) have said a mouthful about the first 1000 days of life and how these are the most important for children's development and future (UNICEF 2017). "When children do not receive the necessary input and support to promote their development during this critical period, it's very difficult and costly to help them catch up later" (Ilifa Labantwana 2017, p.4). At first, ECD was governed by the Child Care Act 74 of 1983, which was repealed by section 313 of the Children's Act 38 of 2005. Critical period of child development involves learning through play.

Relevant, age-appropriate learning through play, which supports well-being of learners, is an important aspect of stimulating learning in the early years. Consequently, it is imperative that South Africa has a well-trained workforce of ECD practitioners who can meet the needs of learners. There are, however, many challenges that constrain a positive outcome. "A significant number of children under the age of six do not have access to essential ECCE services such as clean running water, adequate nutrition and safe structures to learn in" (Ilifa Labantwana 2017, p.6). Due to the immense difference in context, a clear line must be drawn between young children in rural areas and those in urban settings. The rural environment is often characterised by lack of access to clinics, schools and adequate nutrition, which can lead to stunted growth. At national level, more than 20% of children under the age of five suffer from stunting or other health issues resulting from malnutrition (Berry et al., 2013; Ilifa Labantwana 2017).

Attempts have been made to combat the challenge of malnutrition through school feeding schemes, which usually provide one cooked meal a day. Despite the fact that many feeding schemes provide schools with support, learners continue to suffer. One of the problems is that ECD centres close for school holidays, resulting in learners no longer receiving a daily meal. In addition, many current feeding schemes operate more in urban or peri-urban areas than in rural settings. This places responsibility for nutrition back at the door of primary carers, such as parents, older siblings and grandparents (Harrison, 2020). Nutrition poses another serious challenge in ECD. Due to the extraordinarily high prevalence of poverty in South Africa, hunger, malnutrition and food insecurity are significant challenges facing children in communities across the country. Nutrition is a basic physical need. The absence of adequate nutrition greatly affects a child's early development (composed of physical development, brain development, cognitive and learning abilities), which can lead to significant, negative adult outcomes, such as reduced earning potential in adulthood (Wildeman & Mbebetho, 2005; Victora et al., 2008). The physical effects of inadequate nutrition are severe. Even in mild cases, malnourishment can cause direct and irreversible structural damage to the brain, impair motor

development, cause significant developmental retardation, affect cognitive development, impair exploratory behaviour, impair learning abilities and educational achievement, and can have long-lasting impacts on their health (Duggan, Watkins & Walker, 2008; Victora et al., 2008).

While the importance of ECD has been highlighted, South African children also have a right to be taken care of and protected. The Children's Act 38 of 2005, in line with Section 28 of the Constitution was drawn to provide protection for children and to make sure that they are taken care of no matter where they live and who takes care of them. It safeguards the rights of children from birth to the age of eighteen. It serves as a replacement for the Child Care Act 74 of 1983 of the apartheid government. Further, Chapter 3 of the Children's Act focuses on the responsibilities of parents while Section 7 addresses the best interest of the child. Amid external influences disorientating the family structure, the Act guards children and warrants that their constitutional right to care and protection is conserved. This Act ensures that children live in an environment that nurtures them holistically. The best interest of a child is the responsibility of parents. It is, therefore, important for parents or adults who perform a parental role to create supportive families that encourage each other to learn and offer the possibility to be better. Therefore, parents must create an environment that motivates a child to practise all the good habits they want the child to imbibe. Although the government provides a comprehensive framework for ECD, the obligation of child development and preparation for school primarily rests on parents. The National Curriculum Framework acknowledges the importance of families as initial teachers of a child (DBE, 2015).

### 2.3 ECD SECTOR DEVELOPMENT SINCE THE DAWN OF DEMOCRACY IN SOUTH AFRICA

South Africa has come a long way since the beginning of democracy in 1994. This country has been trying to narrow the socio-economic gap through provision of meaningful ECD programme. There have been a number of initiatives affecting the lives of young children directly. They include the following:

- A. The signing of the Convention on the Rights of the Child by our government in 1995.
- B. Free medical and health care services for pregnant women and for children aged birth to six years of age.

- C. The establishment of a Directorate for Early Childhood Development within the national Education Department.
- D. The establishment of a Children's section within the national Social Development Department.
- E. An Education White Paper (Number 5) on early childhood development and a Welfare White paper with a section on early childhood development.
- F. The introduction of Grade R for children aged five years turning six years.
- G. The Expanded Public Works Programme has a focus on early childhood development.
- H. A nationwide ECD Audit surveying 23,482 ECD sites was successfully completed in 2000.
- I. The nine provincial Social Development Departments making ECD subsidies available for ECD sites each year.
- J. The nine provincial Education Departments making Grade R grants-in-aid available.
- K. The Children's Act, with two chapters that deal with partial care facilities and early childhood development programmes was passed by Parliament.
- L. Many grant-making organisations and companies have continued their support of the early childhood development sector.
- M. 10.5 million children received the Child Support Grant (CSG) by April 2011.

While there have been advances made in the provision of services and access to all children in South Africa, the need for a sustained and targeted response to the following challenges remains urgent:

- more than half the children in South Africa continue to live below the poverty line (Hall, 2019).
- some two-thirds of children eligible for ECD programmes do not have access to them (Visser et al., 2021).

In South Africa, the management of ECD programmes has been migrated from the DSD to DBE. This transition took place in April 2022. Sunday World newspaper of the 26<sup>th</sup> of May 2022 stated that as the function of the ECD sector was officially handed over to the Department of Basic Education on the 1<sup>st</sup> of April 2022. South African ECD experts have pointed out that access to early learning and care, the bedrock of good basic education, has little support from the government. Sunday World newspaper (2022, May 26) interviewed ECD experts. This is what they had to say:

Eric Atmore – Director for Centre for Early Childhood Development, a national nonprofit organisation Reacting to the results of the first census on ECD programmes in South Africa, Prof Eric Atmore, director of non-profit organisation Centre for Early Childhood Development, said the survey was long overdue. While applauding the Minister of Basic Education, Angie Motshekga, for comprehensive information on the state of ECD across South Africa, he said the statistics paint a dismal picture of the sector. According to Atmore, the government is neglecting the youngest and most vulnerable children and there is a lack of political will to meet their needs. Atmore further expressed that one of the most shocking findings is that one-third of ECD programmes use pit latrines for children. Atmore emphasises that pit latrines are a danger to young children as a number of children have already fallen into these and drowned.

Atmore commented on a number of reasons why ECD centres do not register. "First, they do not have the funding to obtain and pay for the municipal clearances that are necessary as it relates to zoning and land use. Second, the majority of ECD centres exist in very poor communities where people cannot afford to get their physical structures to a quality that the Children's Act requires. Third, the registration process is complex, overregulated and with much red tape that hinders registration" as exposed by Atmore (2022, May 26).

### Zaheera Mohammed – Chief Executive Officer of Ilifa Labantwana

Zaheera Mohammed, Chief Executive Officer (CEO) of Ilifa Labantwana, which advocates for universal access to early learning opportunities for all children, also noted that the important work of developing and caring for our children is being done without government. Mohammed further stated that it is unsurprising perhaps that 66% of four- to five-year-olds are not developmentally on track as indicated in the recent release of the *Thrive by Five* report which looked at whether the development of preschool children was on par with their age. Furthermore, with 7 056 000 children aged zero and five, the fact that only 1 660 316 (23%) children were enrolled in early learning programmes surveyed suggests that most children do not have meaningful access to early learning and care opportunities. According to the report, there are 42 420 ECD providers in South Africa, and only 40% are fully or conditionally registered. In addition, only 33% of the registered or partially registered receive a government subsidy.

Mohammed added that "ECD suffers from a complex web of competing norms and standards (Children's Act, National Health Act, and local by-laws) which led to significant expectations of ECD providers, many of whom operate informally. Efforts must be made to make

registration more inclusive. "We need a one-step registration process for ECD providers. The infrastructure needs of the sector must be supported," said Mohammed (2022, May 26).

### Monica Stach - Chairperson of the National Early Childhood Development Alliance

Monica Stach, the chairperson of the National Early Childhood Development Alliance, highlighted the need for providing resources and training to ECD practitioners. "We are concerned that 22% of the practitioners do not have a relevant qualification. ECD practitioners do not have the financial means to obtain a qualification, and sometimes struggle to find a service provider that is close by" (2022, May 26). Stach further stated that "Training focused on play-based learning and the provision of resources needs to be increased, along with on-site support to implement quality early learning programme. Programmes such as toy libraries, book-sharing and resource making should be increased" (2022, May 26).

### Mmatsetshweu Motaung - Director of training and resources in early education

Commenting on the transition of ECD responsibilities from DSD to DBE, Director of training and resources in early education (TREE), Mmatsetshweu Motaung said although it was a great initiative that would help get rid of unregistered ECD centres, it was not as simple as just signing the papers.

"The challenge is the readiness of the education department in terms of taking over. We always talk of children being ready for school, but we miss checking if the schools are ready for the child. ECD plays a critical role in preparing a child to thrive in primary and secondary school. They have been divided into three age groups: conception to two years (first 1 000 days); Hchildren aged three to five years – stronger early learning focus; and Grade R, entrance to formal schooling," Motaung said (2022, May 26).

### 2.4 PROVISIONING OF ECD SECTOR BY THE STATE

South Africa is a country characterised by contrast and diversity, a country where children have equal rights under the Constitution, but where the worlds into which they are born and their opportunities in life are very unequal (Ashley-Cooper, van Niekerk & Atmore, 2019). While the rights of children are progressively and clearly defined, ensuring that these rights are fulfilled for every child in the context of deep-seated inequality remains a pressing challenge.

In South Africa, there is no equality in terms of provision of ECD programmes. This is validated by the South African Early Childhood Review (2017) which reveals unambiguous inequalities that exist across the country. Children experience a significant disparity in the delivery of services based on the geographical location in which they reside (Hall et al., 2017). Health care, social security and education are some of such services (Ashley-Cooper, van Niekerk & Atmore, 2019). There are serious concerns that absence of such can be detrimental to the development of children in as far as well-being, academic achievement and earning potential of South African children are concerned (Hall et al., 2017).

A large number of young children are negatively affected by a variety of social and economic inequalities which resulted in deprivation of their fundamental right to early education (Ashley-Cooper, van Niekerk & Atmore, 2019). International evidence reveals that ECD interventions can protect children against the effects of poverty; and that investment in quality ECD programmes for young children has a significant effect on reducing poverty and inequality across society (Ashley-Cooper, van Niekerk & Atmore, 2019). Currently, children in South Africa are exposed to significant variation in the distribution and quality of ECD programmes.

UNICEF (2014) in Early Childhood Development Statistical Snapshot: Building better brains and sustainable outcomes for children states that children under five years of age in low- and middle-income countries, face inequalities. Consequently, they do not reach their development potential and face increased risk especially poverty, poor health, malnutrition, infection with HIV and inadequate early stimulation. UNICEF (2014) suggests that ECD is the most effective investment that a country can make towards social and economic development. South Africa is viewed by recent UNICEF research to be one of the most unequal societies in the world and its nineteen million children bear the burden of this disparity (StatsSA, 2020). This threatens their constitutional rights because they become victims of social ills and inequality that seem to lower a child's level of educational achievement (Mbarathi, Mthembu & Diga, 2016). Essentially, the literature reviewed maintains that there is a strong belief that the provision of ECE has the ability to eradicate the injustices of the past by empowering communities, reducing inequalities, and breaking away from intergenerational poverty. The South African government has prioritised increased access to ECD programmes for all children, especially babies, toddlers and young children growing up in conditions of abject poverty and neglect (DoE, 2001). To support this mandate, the education system requires appropriately qualified practitioners in the ECCE domain to meet this demand. However, generally in rural settings there is an alarming shortage of well-qualified practitioners in ECCE centres (Visser et al., 2021). To combat the shortage of qualified ECCE practitioners challenge, the Department of Higher Education and Training in 2017 developed the policy on the 'Minimum Requirements for Programmes leading to

Qualifications in Higher Education for Early Childhood Development Educators' (MRQECDE) which was aiming at regulating the professionalisation of the sector. The MRQECDE policy outlines a set of minimum qualifications for ECD practitioners interested in teaching babies, toddlers and young children.

ECD qualifications start with the National Qualifications Framework (NQF) Level 1 which is a basic Certificate in Early Childhood Development. This qualification is equivalent to Grade 9. According to UNICEF (2011), the purpose of the qualification is:

- to provide access to training for many experienced people who work with young children but have not had the opportunity to receive any training or education.
- to enable learners or practitioners to understand and respond appropriately to the basic needs of young children in all areas of their development and in a specific setting; for example, centre-based or home-based; and
- to improve the quality of ECD services for young children in different ECD facilities.

The next level is a Level 2 National certificate, which focuses on health and safety and interactions with children. Practitioners at this level work under the supervision of others as assistants. Furthermore, the following qualifications are available:

- NQF Level 3 National Certificate: Community Development (Qualification ID 66749)
- NQF Level 4 Further Education and Training Certificate (FETC): Community Development (Qualification ID 76984)
- NQF Level 4 Occupational Certificate: Early Childhood Development Practitioner (Credits 131) (Occ. Code 234201 & SAQA ID: 58761)
- NQF Level 4 National Certificate Community Development: ECD (Qualification ID 83388)
- NQF Level 5: National Diploma: Early Childhood Development (SAQA ID: 64650)

The NQF Level 5 National Diploma in Early Childhood Development allows graduates to work as fully qualified early childhood practitioners and to register with the South African Council for Educators (SACE). Practitioners working at ECD centres must at least have an NQF Level 4 qualification. The above qualifications can be obtained through different colleges, private sectors and NGOs. As ECD steadily grew and gained popularity, it became politically inclined. A research study conducted by Visser et al. (2021) revealed that there are ECD practitioners currently teaching Grade R who have not undergone formal professional training. There are also unqualified and inadequately trained practitioners who are only inducted by way of inservice programmes. The findings from the research study conducted by the Department of Performance Monitoring and Evaluation (DPME) in 2012 revealed that educators struggle to teach the Grade R learners (Barnard & Braund, 2016). Therefore, a stern monitoring of the sector as well as ensuring that ECCE practitioners are appropriately qualified was suggested by the findings.

### 2.5 POLITICAL STANDPOINT OF THE ECD SECTOR

In South Africa, ECD has become a political priority (SONA, 2021). The governmental interference in ECD has been caused by major gaps in its provision. These gaps were identified by the Director for Centre for Early Childhood Development, Prof. Eric Atmore, back in 2013. The gaps he flagged included infrastructure, nutrition, ECD programmes, teacher training, institutional capacity and funding (Atmore, 2013). When these were identified, the National Development Agency (NDA), in support of the Department of Social Development (DSD), involved itself to lend a hand in eliminating these challenges. The aim of the involvement of the NDA was to assist ECD to strengthen its programmes thus intensifying school readiness for learners. The NDA is a government agency whose mandate was to alleviate poverty, and inequality and create cohesion in South African communities (The NDA Report 2018/2019). The South African government had also long realised the importance of ECD. A governmentorganised South African ECD conference was held in East London on the 30th of March 2012, and it was attended by 646 national delegates. The theme of the day was centrally focused on 'Building future leaders through ECD' (Davids et al., 2015). Among the delegates who attended the conference were, "policy-makers, donors, government ministers, government officials, nonprofit representatives and academics" (Davids et al., 2015, p. 2). Subsequently, the conference saw the release of "the Buffalo City Declaration on ECD" (Atmore, 2020, p.34). This conference was centred on improving the lives of children through ECD. For children to

experience higher levels of well-being, the public services and education system of a country, including ECD become a specific point of interest.

Prior to the conclusion of the transition process, ECD had become complex in nature because it had grown to be a responsibility of both the Department of Basic Education (DBE) and the Department of Social Development (DSD). However, subsequent to the 2019 State of the Nation Address (SONA), both departments worked diligently towards the realisation of the change in responsibilities for the provision of ECD services. President of the Republic of South Africa, Mr. Cyril Ramaphosa signed the proclamation relating to the transfer of powers of the ECD function from the Minister of Social Development to the Minister of Basic Education. The second proclamation was signed by the Premiers for the transfer of power and functions to the Member of Executive Council (MEC) responsible for Basic Education in each province. The proclamations further specify that the date of the implementation of the ECD function shift would be April 1, 2022. The move would allow for a standardised ECD function to ensure structured learning in the sector, including a managed curriculum. This means that the ECD Curriculum would also be aligned with the CAPS (News24, 2021, November 18). This is supported by Mbude (2021, p.1) who states that the move from the Department of Social Development to the Department of Basic Education "will allow for a standardised ECD function, to ensure structured learning in the sector, including a managed curriculum. This means that the ECD curriculum will also be aligned to the CAPS curriculum".

Political parties such the Democratic Alliance have taken special interest in ECD matters. According to The Citizen Newspaper, 21 May 2021, the DA called for the speedy completion of ECD centres in the Emfuleni local municipality. The party said that four ECD centres built in Emfuleni in the past 10 years are yet to be completed and remain non-operational. "There have been unnecessary delays in completing the following ECD centres in Boipatong, Bophelong, Evaton and Sharpeville," the DA's Kingsol Chabalala said (2021, May 21).

"This greatly concerns the DA, as children in these areas are denied opportunities to learn and develop at a younger age. ECD centres, particularly in the townships, play a crucial role to serve children from families who are socially, physically, and economically segregated" Chabalala (2021, May 21) proclaimed.

### 2.6 INTERNATIONALISATION OF THE ECD SECTOR

ECD has been internationalised for over two decades now. This has been done through globalisation of ECD. Shonkoff et al. (2012, p. 465) assert that "as the science of ECD has received increasing recognition globally, the demand for greater attention to the needs of young children has been incorporated into several high-profile international documents". Several world organisations have paid careful attention to ECD through policy making. These international organisations include:

- The European Union (EU)
- The International Labour Organisation (ILO)
- The Organisation of American States (OAS)
- Organisation for Economic Co-operation and Development (OECD)
- The United Nations Educational, Scientific, and Cultural Organisation (UNESCO)
- The United Nations Children's Fund (UNICEF)

The above-mentioned international organisations have paid particular attention to the issue of Early Childhood Education and Care (Atmore, 2013; White, 2011). Atmore (2019, p.2) makes particular mention of "the Report of the World Health Organisation Commission on Social Determinates of Health (Commission on Social Determinates of Health (Commission on Social Determinates of Health (Commission on Social Determinates of Health [CSDH], (2008) the Sustainable Development Goals (SDGs) (United Nations, 2015)". The above-mentioned organisations aimed at providing access to quality ECD and the reduction of health inequities across many areas including ECD. Penn (2004, p.1) emphasises the importance of physical well-being of children and that ECD is global phenomenon by stating that "the World Bank, the World Health Organisation, UNICEF and UNESCO have all stressed the importance of ECD in improving physical and psycho-social well-being and in promoting cognitive gains in young children, as well as directly or indirectly combating poverty".

## 2.7 COMPARISON OF SOUTH AFRICA'S ECD SECTOR AND OTHER DEVELOPING COUNTRIES

Millions of young children in Africa live in impoverished conditions and there is a great and urgent need to improve education, nutrition, health, safety child protection conditions in all African countries. The African continent has the highest rates of child poverty in the world, affecting more than half of young children (Garcia et al., 2008). It is for this reason that it has become necessary to provide ECD programmes and opportunities for young children.

This section outlines ECD within the South African context as well as two other developing countries. Although I was not conducting a comparative study, it made academic sense to take a glance at one African country, namely, Ghana and one other country in another continent, India. The selection of these countries is purposive because the choice is based on their socio-economic status which is, in several ways, like that of South Africa.

The World Bank rates the South African economy as an upper-middle-income economy, one of only four African countries in Africa, the others being, Mauritius, Botswana, and Gabon. However, the official unemployment rate is still extremely high, and a quarter of the population lives on R18.30 per day (The South African Economy, 2020). Ghana is a country in West Africa with a population of about 29.6 million in 2018 (The World Bank in Ghana, 2019). It is the second-largest economy in the region after Nigeria. In 2012, approximately 51.8% of the population was living on less than R30, 56 a day and 28.6% was living on less than R19.10 a day. However, economic growth has averaged more than 6% annually since 2006. (African Economic Outlook, Ghana 2014). Ghana is among Africa's 10 fastest-growing economies (African Economic Outlook AEO, 2020). India is the world's fourth-largest economy. It produced R143.64 trillion in goods and services in 2017, (Amadeo, 2020). All three (South Africa, Ghana and India) are developing countries that have been paying special interest in ECD (Palmer et al., 2007).

### 2.7.1 South African ECD Sector Perspective

In South Africa, there have been several legislations, policies and programmes that have been put forward to address the needs of children. According to the Children's Act 38 of 2005, the ECD sector consists of children from birth to nine years, end of the FP. The ECE White Paper 5 defines ECD as a broad approach to policies and programmes for children from birth to nine years of age. The purpose is to protect the rights of a child so that the child develops in all aspects [UNESCO International Bureau of Education (IBE)]. These aspects include cognitive, emotional, social as well as physical. This development was to be supported by the active participation of parents and caregivers. (DoE, 2001). There is also the National Plan of Action for Children in South Africa (NPAC) 2012–2017 which was developed with the rights of all children in South Africa as its main focus. It looked at the broad areas where we as a country, collectively, work to ensure our children are safe, healthy, happy, educated and developed, are able to participate in matters affecting them and have an adequate standard of living.

### 2.7.2 International ECD Sector Perspectives

Although the western region of Ghana has a low perception of ECD (Lemaire et al., 2013), the education policy of Ghana provides children with two years of free and compulsory preschool programme in an attempt to ensure that young children are enrolled in school for early learning (Wolf et al., 2018). This places Ghana ahead of the curve compared to other countries in sub-Saharan Africa. Efforts are also being made by the Ministry of Education and the Ghana Education Service to reach out to the most vulnerable and disadvantaged children (UNICEF). The Children's Act 560 of Ghana states that every child including children with disabilities have the right to education. Sadly, there are parents who, in this day and age, deny their children with disabilities access to education (Inclusive Education Policy Framework, 2016).

Within Ghana, the National Peoples Party government came into power in 2001 and identified the weakness of Early Childhood Care development. This led to the creation of the Ministry of Women and Children Affairs. To support the survival, protection and development of children aged 0 to 8 within their early years in Ghana, guidance would be taken from this policy framework. This was for the benefit of government and all stakeholders especially Sector Ministries, District Assemblies, and communities, families, civil society, including non-government organisations and the donor community.

Within a case study which was conducted in Ghana, in collaboration with UNICEF and other partners in the country, the aim was to reinforce ECD. Important areas of development that were focussed on include:

- Capacity building and support for the implementation of the national ECCD policy.
- Enhancement of kindergarten education.
- Promotion of ECD through health, nutrition, water, sanitation and hygiene, as well as child protective initiatives.

Enrolment figures grew by 12% between 2005-2006 and increased to 93% between 2009 and 2010. In 2011, the net enrolment rate stood at 63% (UNICEF, Ghana, 2011). The increase in enrolment is attributed to policy changes. These included the incorporation of two years of preschool into the free and compulsory basic education systems. Capitation grants were also provided which influenced the thoughts of families on sending their children to school. Many of the parents had become aware of the benefits of preparing children before their next phase of schooling. An important indicator was the importance of parents who could be involved in

leadership; giving their time and support at the committee level was of uttermost importance in ensuring a successful operation.

### **Implementing strategies within Ghana:**

- Creation of an appropriate environment for developing and implementing Early Childhood Care Development (ECCD) Programmes.
- Promoting Integrated Services.
- Encouraging the establishment of Conventional and Non-Conventional ECD systems for all children.
- Building capacity for ECCD practitioners and institutions.
- Broadening parental participation in the implementation process.
- Providing quality ECCD programmes and services.
- Organising regular research, monitoring and evaluation programmes to enhance all aspects of ECCD systems.
- Mobilising resources for implementing ECCD programmes.

The government has committed to improving the quality of ECCD programmes, where the target was to have 100% of children between the ages 0 to 8 by the year 2015 (Ministry of Women and Children Affairs: nd).

Institutions for teacher training are established, with a small number of teachers being formally trained. Provision is made for a degree in early childhood, and a diploma in basic education, focussing on early childhood. In addition, there is also an eight-week in-service training programme that offers a certificate of participation. All of the above are training programmes to ensure that the children receive a holistic standard of education (Ministry of Women and Children Affairs: nd).

Internationally, Reetu et al. (2017) as well as Yadav (2019) state that the quality of ECCE in India falls behind the rest of the world. It ranked last among 45 countries in the 2012 Economist Intelligence Unit Survey of ECCE quality. This is reiterated by Bardman and Sandhu (2018) who further posit that India, unlike Brazil and South Africa, does not guarantee ECCE to children under the age of 6. This study covers the 4-year age group (pre-Grade R) and the 4.5 to 6 years age group (Grade R). Statistics for 2015 indicate that in South Africa, the 0 to 6 years cohort constitutes 8 207 723 children and of these children, more than 65% are living in poverty (Le Mottee, 2016). According to the World Vision (2014), within India, the percentage of

households that are headed by single women amounts to 39%; these households have half the income in comparison with male-headed ones. In 2000, one out of ten children were found to be severely malnourished, and 1 to 3 children suffered from Vitamin A deficiency. According to the census of 2011, it was discovered that within India there were 158.7 million children in the 0 to 6 years age group. Therefore, the well-being of these children is severely compromised (Chopra, 2012).

### 2.8 CHALLENGES FACING THE ECD SECTOR IN SOUTH AFRICA

This study deems it important to discuss challenges facing the ECD sector in South Africa because it is during early childhood development years that the physical well-being of learners should be nurtured. Petersen and Petker (2012) opine that in the context of South Africa, the greatest need is for teachers in the Foundation Phase, which includes ECD practitioners, to receive adequate training that will enable them to help children develop holistically. These teachers provide the foundation upon which the rest of the schooling sector is built, and they hold the key to unlocking the educational potential of a developmental state. Bipath and Joubert (2016) are of the view that ECD practitioners can be emancipated if high-quality programmes for practitioners are implemented.

Generally, the price of service is related to the quality of that service. According to Wu et al. (2011), price is the value expressed in a currency or medium of exchange for a particular product. Service quality can be identified by comparing consumers' perceptions of the services they actually receive with the services they actually expect/want on the service attributes of a company. Therefore, the notion that ECD practitioners are poorly paid, insinuates that they are not motivated to give the best service. In context, the ECD sector is very poorly resourced, practitioners are paid low salaries, and there is a great inequality in the sector (DoE, 2001). Wallet (2006, p.34) notes that "many ECD practitioners across the country are females". Further, it is maintained that their low remuneration can be attributed to their inferior status, since caring for young ones is viewed as "an extension of the females' familial role and that caring does not require professional skills" (Ackerman 2006, p.99).

Despite these numerous challenges, an increased focus on Early Childhood Education (ECE) in South Africa in terms of quality, equity, and accessibility of ECE, is imminent (DSD, 2015). This increased focus is demonstrated in pertinent documents, programmes, initiatives, collaborative actions, and consideration of programme evaluation.

First, some of the pertinent policies/documents include:

- The National Integrated Early Childhood Development Policy of 2015.
- The National Development Plan: Vision for 2030.
- South Africa's Medium-Term Strategic Framework 2014 to 2019.
- The Action Plan to 2019: Towards the Realisation of Schooling 2030.
- The National Early Learning Development Standards (NELDS).

• Guidelines for Programme Development and National Curriculum and Assessment Policy Statement (CAPS).

• Changes to the South African Schools Act through the Basic Education Laws Amendment (BELA) for mandatory attendance at learning centres two years prior to grade 11.

• The development of a National Curriculum Framework (NCF) for learners 0-4 years of age, which did not exist prior to 2012. The NCF has been envisioned as follows:

"Working with and for all children in the early years in a respectful way to provide them with quality experiences and equality of opportunities to achieve their full potential" (DBE, 2015, p.2)

### 2.8 CHAPTER SUMMARY

ECD has become a prominent international policy concern. The climate has become more complex, more valuable, and more relevant. Governments, societies, and communities are realising the importance of investing in children at the earliest stage. Increasingly, ECD practitioners face a daunting yet ground-breaking opportunity to positively impact South African economic growth and social development through early education investments. The centrality of the role of primary caregivers of learners to their development cannot be overlooked.

The next chapter will present part two of literature review which focuses on a survey of scholarly sources relating to the physical well-being and school readiness of four-year-old learners. Studies reviewed are related to the questions of this research study and they appear in later chapters juxtaposed with the new findings of the current study. Key ideas, terms and

vocabulary are unpacked. This includes work by seminal researchers and research within the field of early ECD.

### **CHAPTER THREE**

### REVIEW OF LITERATURE (PART 2) PHYSICAL WELL-BEING OF LEARNERS

### **3.1 INTRODUCTION**

In the previous chapter, I provided an overview of the study. This chapter will present the review of related literature. Studies reviewed are related to the questions of this research study and they appear in later chapters juxtaposed with the new findings of the current study. Key ideas, terms and vocabulary are unpacked. This includes work by seminal researchers and research within the field of early ECD. Literature review plays a role in uncovering new perspectives and variations of existing knowledge in a particular field. It synthesises the topic of the study (Bolderston, 2008; Kanano & Muniz, 2018; Snyder, 2019). Literature, therefore, is the foundation upon which one builds a study by identifying gaps and paucity of information that exist in the body of knowledge (Ridley, 2012; Aldagher et al., 2018).

This chapter reviews related literature and describes the concept of interest and related concepts. These include well-being in general and physical well-being in particular, school readiness, the state of ECD in South Africa in comparison with other developing countries, health as a determinant of school readiness and challenges in the ECD sector in South Africa. This chapter ends with a chapter summary.

### **3.2 SCOPE OF THE ECD SECTOR**

Early childhood development programmes have had constructive bearing on the lives of hundreds of thousands of children in various countries worldwide (World Bank, 2017). The early years are important for developing a child's potential as a content and efficacious human being. According to UNICEF, the ECD framework covers four important areas. These areas are: (i) the first 1000 days of a child's life, (ii) early learning and protection, (iii) caring for the caregiver and (iv) family support. The afore-mentioned areas form part of the microsystem as pronounced by Bronfenbrenner's Ecological Systems Theory which is discussed in Chapter 3

of this study. They are all connected to the environment that is nearest to the child. (Ettekal & Mahoney, 2017; Eriksson et al., 2018).

### **3.3 FINE AND GROSS MOTOR SKILLS DEVELOPMENT**

Motor skills are the foundation upon which any physical movement, whether premeditated or not, is established. This study advocates that these skills are important in nurturing physical well-being. Research on motor development has previously been viewed as the "Cinderella of developmental science" (Gonzalez et al., 2019, p. 1). It is given this princess status because of its importance in the development of children yet it is hardly an area of interest (Rosenbaum, 2005; Adolph et al., 2010). It is in this light that I have decided to examine this rarely visited phenomenon. This study supports that motor skills are central to the development of physical, social, and psychological well-being of children (Gallahue & Ozmun, 2002; Hestback et al., 2017). Although it is generally assumed that they are inborn and begin with spontaneous movements, motor skills must be learned and willingly produced in order to accomplish a particular, driven mission (Williams et al., 2008; Lubans et al., 2010; Adolph & Franchak, 2017). Development of motor skills transpires over reasonably comprehensive periods through progressions of transformation in motor behaviour. Motor behaviours cannot be understood in seclusion, dissociated from the environment in which they occur including the social perspective (Adolph & Robinson, 2017). This is posited by Miquelote et al., (2012, p.329) who state that "aspects of motor ability are associated with cognitive ability."

In exploring the physical well-being of four-year-old learners, gross and fine motor skills are distinct types of motor skills that should be understood and elucidated at length. The group of interest in this study is in the age 4 to 5 years bracket where a learner in terms of gross motor skills, "runs more smoothly with control over stopping and turning, descends stairs alternating feet, jumps 24 to 33 inches, skips, throws ball by rotating the body and transferring weight to one foot, catches ball with hands, rides tricycle and effectively"; and " uses scissors to cut along a line, uses fork effectively, copies simple shapes and some letters" as far as fine motor skills are concerned (Kuther, 2018, p.7).

There has been a noticeable interest in the preference for barefoot by preschool learners (Matsudaet al., 2016). This is further posited by Hollander, van der Zwaard, de Villiers, & Braumann (2017, p.2) who state that "the general interest in barefoot has increased and attracted a scientific focus for more than a decade". Through my observations, walking barefoot

strengthens the muscles in learners' feet and ankles, improving balance and posture. It engages the feet's arches, strengthens them, and improves the alignment of muscles throughout the legs.

### 3.3.1 Gross Motor Skills

According to this study, rolling, crawling, walking, jumping, running, reaching, hopping, skipping and dancing form part of gross motor skills because they are large movements that are performed by the body. Gonzalez et al. (2019, p.2) define gross motor skills as "skills involving large muscle movements, such as independent sitting, crawling, walking, or running". They also include movements such as pulling, pushing, twisting, turning and swaying. They involve the ability to hold our body upright sitting at a desk or standing on uneven ground. They also help us coordinate more complicated movements related to playing a sport, such as throwing, catching, kicking, riding a bike and swimming. Gross motor skills refer to moving the whole body and using larger muscles, such as those in the arms and legs.

### **3.3.2 Fine Motor Skills**

Fine motor skills are those that "involve the use of smaller muscles, such as grasping, object manipulation, or drawing" (Adolph et al., 2011; Lurio et al., 2015; Begnoche et al, 2016; Adolph & Franchak, 2017). They involve more elaborate and detailed movements, such as hand use, finger use, and meticulous mouth and tongue movements for a specific task. Fine motor skills include the ability to hold a pen or pencil, draw shapes and letters, cut with scissors, tie shoes, zip up a jacket, button a shirt, or turn the pages of a book. Fine motor skills refer to the use of the small muscles found in individual body parts, especially those in the hands and feet (US Department of Health and Human Services, 2020). Table 3.1 below presents an arrangement of both gross and fine motor skills according to different age groups.

# **Table 3.1:** A table of self-care skills**SOURCE:** Kuther (2018)

AGE	GROSS MOTOR SKILL	FINE MOTOR SKILL
2-3 years	Walks more smoothly, runs but cannot turn or stop suddenly, throws a ball with a rigid body and catches by trapping ball against chest, rides push toys using feet.	Unzips large zippers, puts on and removes some clothing, uses a spoon.

3-4 years	Runs, ascends stairs alternating feet, jumps15 to 24 inches, hops, pedals and steers a tricycle.	Serves food, can work large buttons, copies vertical line and circle, uses scissors.
4-5 years	Runs more smoothly with control over stopping and turning, descends stairs alternating feet, jumps 24 to 33 inches, skips, throws ball by rotating the body and transferring weight to one foot, catches ball with hands, rides tricycle and steers effectively.	Uses scissors to cut along a line, uses fork effectively, copies simple shapes and some letters.
5-6 years	Runs more quickly, skips more effectively, throws and catches a ball like older children, makes a running jump of 28 to 36 inches, rides bicycle with training wheels.	Ties shoes, uses knife to cut soft food, copies numbers and simple words.

### **3.4 CONCEPTUALISATION OF SCHOOL READINESS**

According to Pekdoğan and Akgül (2017, p.145), there are certain areas which need to be prepared to make preschool learners be school ready. They are summarised as follows:

- a. Reading readiness skills pre-reading and pre-writing skills, voice recognition, providing hand-eye coordination)
- b. Math skills (recognising numbers between 0-20, creating sets, learning colours, shapes, etc.)
- c. Social skills (waiting his/her turn, following the instructions, listening quietly, sharing, cooperating, focusing attention)
- d. The motor skills (large and fine motor development)
- e. Emotional skills (expressing his/her feelings appropriately, showing empathy towards others)
- f. Self-care skills (meeting their own needs, cleaning, nutrition, recreation, taking off/getting into his/her clothes unassisted)

This study mainly concentrates on point number 'd'of the above points (The motor skills (large and fine motor development) and point number vi of the above points (Self-care skills (meeting their own needs, cleaning, nutrition, recreation, taking off/getting into his/her clothes unassisted). Much research has been conducted on learners' readiness for school because it is

vital for a smooth transition to a formal learning environment (Al-Hassan & Lansford, 2009). The importance of a smooth transition from preschool years to a formal learning environment has been an international concern (Chan, 2012). Furlong and Quirk (2011) believe that school readiness is useful in predicting academic achievement. According to the Annual National Assessment (ANA, DBE, 2011), an alarming number of Grade 3 learners in South Africa produce appalling results because "difficulties that Grade 3 teachers face to teach reading should be seen as part of a big system, and it requires that all subsystems work together to deal with the problems and difficulties" (Phala & Hugo, 2022, p.51). Hence this study is underpinned by the ecological systems theory of child development as will be discussed at length in Chapter 4 of this study.

School readiness is one of the duties of four-year-old learners' parents and ECD practitioners since they ultimately want to see their children and learners, respectively, ready to engage in age-appropriate school activities and subsequently doing well at school. Parents play a pivotal role in providing a conducive environment for children to learn long before preschool years. This is supported by Janus and Kudu (2010) who state that school readiness is not a trait that suddenly surfaces just before school entry but rather a result of the child's experiences up to that point. Pienaar et al. (2011) posit that there should be a compiled programme for motor development, sensory integration and perceptual development in preschool children. For such an intervention to be successful, it is suggested that ECD practitioners should be sufficiently trained to implement such a programme.

School readiness is a complex concept to define. Powell (2010) and Saracho (2015) state that the description of school readiness is dependent on the context in which it is used. The question is what the determinants for school readiness are. Bruwer et al. (2014) and van Zyl (2011) state that there is a relationship between school readiness and a learner's academic performance. However, some earlier scholars state that children are born ready to learn (May & Campbell, 1981; Kagan, 1999). This argument is fuelled by recent scholars like Rahmawati et al. (2018) who postulate that school readiness is a primary school requirement that needs to be equally addressed by parents and teachers.

Many children enter school with physical, cognitive, social and emotional limitations that could have been minimised or eliminated through early attention to the children (Commodari, 2013; Chan, 2015). School readiness may be divided into three basic skills: Intellectual, Social and

Physical (Fauth & Thompson, 2009; Prinsloo & Reid, 2015; Erasmus, 2018). Therefore, school readiness is multi-faceted.

### **3.4.1 Intellectual Readiness**

Naz et al. (2014, p.993) define intellectual wellness as "discovering hidden talents of artistic, inspiring and thought-provoking activities to enhance one's mental capabilities and flourish one's own personality". A learner must, therefore, have the ability to understand, reason and interpret new concepts. According to Mazurek and Neale (2018, p.10) "the intellectually well person values lifelong learning and seeks to foster critical thinking, develop moral reasoning, expand world views, and engage in education for the pursuit of knowledge". However, learning begins at a tender age. At the age of four to five years, learners absorb and process all new information. Enquiry skills and concept construction in young learners develop through play (Drew, Christie, Johnson, Meckley, Nell & Chalufour, 2008).

Davis et al., (2015) stress the importance of the time parents spend with their children. We are experiencing such a big change in our society where both parents work and do not find time to interact with their children. In the little time, they scarcely find, they often focus on developing intellectual skills and not physical or social skills although wellness is a holistic integration of physical, mental and social well-being (Stoewen, 2017). Televisions and computers have also become an easy way to keep children busy while parents are attending to house chores. Nikken (2019) reckons that parents use these devices as useful tools for child-rearing. Although it is not wrong to use these devices moderately, parents must also remember to play outside with their children by kicking the ball around or playing hide-and-seek.

### 3.4.2 Social Readiness

Transition to Grade R cannot be a smooth one partly because a child is going from his/her 'safe' environment to a structured environment with other routines, longer hours and more pressure. Transition can be interpreted as a potentially stressful situation. "It involves the transition from the family to the kindergarten and from the kindergarten to school, including "horizontal transitions," when the child is transferred from one educational institution to another at the same level (Babić, 2014). It also involves changes in the individual's identity, changes in the relationships between children and between children and adults (educators, teachers, parents), changes in the structure of the routine, learning strategies and expected learning outcomes (Ahtola et al., 2016; Ahtola et al., 2011).

UNICEF (2012, p.8) defines the process of transition in ECD as "children moving into and adjusting to new learning environments, families learning to work within a socio-cultural system (i.e., education) and school making provisions for admitting new children into the system". This transition is filled with sensitive and social alterations (Phatudi, 2007). As child development does not occur in a vacuum (Fauth & Thompson, 2009), a child needs to be socially comfortable in an environment he/she finds himself/herself in. If a child cannot play socially with other children, they do not learn turn-taking and negotiation skills. A child who is not socially and emotionally sound will scream, yell and complain and cling to their mother's skirt when it is time to go to attend school. When interacting with other learners, conflict, unhappiness, dishonesty are inevitable, and the ECD practitioner acts as a judge, but this teaches the children how to manage and process difficult situations. This skill will teach them how to manage stressful situations for the rest of their lives and how to be adaptable to the unknown. Although child well-being is multifaceted (Pollard & Lee, 2003), it remains not clear-cut in terms of boundaries because of its interwoven nature (Amerijckx & Humblet, 2013).

### **3.4.3 Physical Readiness**

Physical readiness refers to all development in movements made by our bodies. Many of these movements are learnt automatically because they are movements made by us daily. Hardy, White and Gray (2015) refer to such conscious movements as voluntary. Examples are rolling, sitting, crawling, walking and running. Involuntary movements are a result of the unconscious movement of muscles in the internal organs of the body such as the stomach, intestines and bladder. This study deals with conscious, voluntary fine and gross motor skills that require to be developed so that a four-year-old learner may achieve physical well-being.

### **3.5 LEARNERS' PHYSICAL WELL-BEING AND MOTOR DEVELOPMENT**

This study advocates that there is a great need for four-year-old learners to acquire physical well-being and motor development skills. Physical well-being and motor development are skills that are essential to healthy growth and development and success in school. Physical well-being encompasses all aspects of good health, including nutrition, sleep and regular check-ups. Many scholars including Janus and Duku (2007) and Barbarin et al. (2008) state that physical well-being as the first criterion for school readiness includes physical health and fitness, adequate energy levels for classroom and playground activities as well as skills that are required for daily

living including the ability to take care of own needs. Motor development focuses on small (turning pages, holding a crayon, building with Legos, cutting with scissors) and large (crawling, running, bouncing a ball) movement skills.

### 3.6 THE NEED FOR PHYSICAL WELL-BEING

A review of relevant literature revealed an increase in articles, research studies, reports and conferences in the past 20 years and beyond, highlighting the importance of pre-primary stimulation for perpetual development and school readiness (Erasmus et al., 2011; Perry, 2010; White, 2008). Piotrkowski, Botsko and Matthews (2001, p.540) recognise physical well-being as the first of the "five dimensions of children's readiness resources". This is reiterated by Roberts, Lim, Doyle and Anderson (2011, p. 117) who proclaim physical well-being and motor development; social-emotional development; approaches to learning; language usage and communication skills; and cognitive skills and general knowledge as five "major skill areas" for school readiness of learners.

With physical well-being as the first criterion of the five for school readiness, there has been a conspicuous decline in the physical activity of preschool learners over the past few decades (Ali et al., 2017, Robinson et al., 2012; Lucas & Schofield, 2010). Yet, there are general physical expectations of the state of a four-year-old learner who is gearing up for Grade R. Hesketh et al. (2012); Skouteris et al. (2012) state that children should be able to engage in age-appropriate physical activities which will speak to school readiness. Gu et al. (2016) differentiate between physical activity and physical fitness, stating that the former promoted growth and development while the latter is an indicator of health-related outcomes. Physical well-being is a necessary skill for learners in Grade R where formal schooling begins. In order to improve their physical well-being, learners need activities that would enhance their motor skills proficiency (Barnett et al., 2008; Bamitale & Boluwaji, 2013).

### **3.7 CHARACTERISTICS OF SCHOOL READINESS**

The importance of school readiness has been emphasised by Abott-Shim et al. (2003); Pandor (2005); Beeld (2008); Powell (2010); SAQA (2007); UNESCO 2006; National Forum on Early Childhood Policy and Programs, 2010). It is further reiterated by Al-Hassan and Lansford (2009) as well as Furlong and Quirk (2011) who mention the significance of a smooth transition from mostly unstructured learning to structured learning, where learners are taught to sit quietly

and have structured lessons with a formal curriculum for the first time. UNICEF (2012) defines school readiness by two characteristic features on three dimensions. The characteristic features are 'transition' and 'gaining competencies,' and the dimensions are children's readiness for school, schools' readiness for children, and families' and communities' readiness for school (Britto, 2012). In terms of clearing the three dimensions, United Nations Children's Fund (UNICEF) stated three important points about the significance of children, schools and families in terms of children's school readiness:

- a. Children who are prepared effectively for school, focus on learning and development.
- b. Schools which are ready provide optimum conditions for children's learning and development.
- c. Ready family and the closest environment to a child's family provide support for the early learning and development of children (UNICEF, 2012).

Fenech (2013); Nitecki (2015); Lang et al. (2016) and Boethel (2004) stress the importance of a strong connection between families, homes and communities. This is emphasised by McGettigan and Gray (2012, p.16) who view school readiness as "a multidimensional construct that incorporates all aspects of a child's life that contribute directly to that child's ability to learn". This can be translated to children who are ready to learn (Ready Children), schools that are ready to accommodate children with diverse needs (Ready Schools) as well as families, including communities, who support learners' development (Ready Families).

### 3.7.1 Ready Children

Children's readiness for school in this section refers to all children, especially the disadvantaged who live in rural areas where ECE has not been a priority. For children from such backgrounds, being ready for school is not easy, especially because "this process is more difficult for the children who did not go to preschool institutions such as kindergarten, nursery school" (Pekdoğan & Akgül, 2017, p.144). However, multidisciplinary research has provided enough evidence that by the age of five, a brain of a child is fully developed and ready for lifelong learning (Haartsen, Jones, & Johnson, 2016; Kaul & Bhattacharjea, 2019). In addition, readiness for school is different from readiness to learn. Readiness for school implies being prepared to succeed in a structured learning setting that focuses on children's skills to meet school demands (Janus, 2007), such acts as sitting quietly and responding to instructions

(Kagan, 1990; Doherty, 1997), working together, listening to a teacher, and benefiting from educational activities provided by the school (Janus, 2007; Doherty, 2007).

The nature of school readiness, however, more importantly, refers to children's skills required to meet cognitive, physical, and social demands when a child enters school (Mashburn & Pianta, 2006; Pianta, Cox & Snow 2007; Janus & Gaskin, 2013). This phenomenon of readiness for school has been an issue of international concern. In England, the Allen Review (2011) and the Field Review (2010) were influential in pushing a model of early intervention to ensure school readiness. In a speech about opportunity, given after winning the general election in 2015, the Conservative Prime Minister pledged his commitment to these interventions stating:

And because all the evidence shows if you focus on the early years, you have the best chance of transforming a child's life, we will look at how we can create a much more coherent offer to support children and parents in the early years, bringing together all those services targeted at getting children school-ready by age 4 (Cameron, 2015).

Although scholars like Drummond (2010); Moshman (2005) and Goddard (2012) state that philosophers like John Locke (1632–1704) proposed that a new-born child is in a tabula rasa state, children are ready to learn when they are born (Janus, 2007; Kagan 1999). Tabula rasa simply translates that a child is born in a state of an empty vessel. Readiness to learn is an instinctual characteristic from birth. The absurdity of the notion of tabula rasa (blank slate) is emphasised by several scholars including Goddard (2012); Marler (2017); Plotkin (2001).

Kihlstrom and Park (2018) posit that Jean Piaget suggested that children enter the world with an elementary set of reflex-like reasoning structures, called *sensory-motor schemata*, through which the child interacts with the world. Ecological dealings are deduced through fundamental cognitive schemata, but they also force these schemata to change in order to assist the child to manage an increasingly complicated stimulus environment. Through the cycle of acclimatisation and adaptation the child develops through numerous qualitative and diverse stages, each highlighted by specific milestones (Badakar et al., 2017; Fancher & Rutherford, 2012; Malik & Marwaha, 2021). Therefore, children are not born "empty." They are born with certain fundamental skills upon which more complex abilities are developed. Ebrahim, Seleti and Dawes (2013) state that children from birth to the age of five learn at an alarming rate, and therefore "attention needs to be paid to their holistic development (physical-motor, socialemotional, communication-language and cognitive abilities) in integrated ways" (p.66). This learning occurs before entering school and extends beyond the walls of a classroom to daily life (Hutson, Cooper, & Talbert, 2011; Larsen, Walsh, Almond & Myers, 2017).

Although children are born ready to learn, poverty has a bearing on the rate at which they learn. The African continent has "the highest rates of child poverty in the world, affecting more than half of young children" (Garcia, Virata, & Dunkelberg, 2008, p. 26). Poverty has a negative bearing on school readiness for children (Connor & Morrison, 2014; Ferguson, Bovaird Mueller, 2007; Joughin, 2019). It is for this reason that it has become necessary to provide ECD programmes and opportunities for young children.



**Figure 3.1:** A graphical representation of child poverty **Source:** Adapted from Isaacs (2012)

Figure 3.1 above is the graph of the x-axis that represents the level of poverty/non-poverty of families of children in terms of school readiness. The y-axis represents the percentage level of school readiness of children. According to the above graph as adapted from Isaacs (2012), fewer than half (48%) of poor children are school-ready. Children who are "near poor" also enter Grade R at a disadvantage, although coping better than poor children: 59% of children from families with income just above the poverty line are ready for school at the age of five. School readiness rises to 75% for children born into households with moderate to high income (Isaacs & Magnuson, 2011).

### 3.7.2 Ready Schools

Schools' readiness for children is defined in terms of the aspects of the school environment that support a smooth transition for children (and their families) into primary school and advanced learning for all children (La Paro, Kraft-Sayre, & Pianta 2003). More recent data on school readiness stress the importance of understanding the interrelationships between the domains and not just the domains themselves.

Readiness of schools implies that the process of teaching and learning should be favourable to a learner in order to enhance his/her development in totality. A school must be ready to provide a learner with a conducive environment so that the process of teaching and learning takes place comfortably for both the teacher and the learner. Certain school and classroom practices have been outlined in recent research on the science of learning and development (Cantor et al., 2019). Most recently, Darling-Hammondet al. (2020) have suggested that there should be sound approaches that support the nature of relationships and learning opportunities that are desirable to promote the overall well-being of children, their healthy development and continuous learning.

#### **3.7.3 Ready Families**

The third dimension of the school readiness paradigm is families' readiness for school. According to Bronfenbrenner's Ecological Systems Theory (year), families form part of the microsystem, an environment closest to a developing child. Prior to entering school, the family is, therefore, the most important context for development. Family, as an institution, has been broadly defined as "a co-residing social unit" (UNICEF, 2012). Concerning school readiness, family is understood as those members who co-reside with the young children, including biological and non-biological caregivers, siblings and extended family members. "Parental styles in the home environment have an important impact on children's stance towards academic and socio-emotional development and children's readiness to learn" (Munnik & Smith, 2019). In understanding the issues of readiness of families for school, the most studied factors have been parenting practices, attitudes and knowledge, which are summarised below. Supportive parenting and stimulating home environments are among the strongest predictors of school performance during primary school and beyond (Bradley & Corwyn, 2005; Morrison & Cooney, 2002; Richter, 2004; Rogoff, 2003; Werner & Smith, 2001; Whiting & Edwards, 1988). Ready families require the involvement of both parents. A result of historical, social and

economic trends as well as entrenched patriarchal norms that cut across the population and cultural groups, women continue to be largely responsible for care in the family. As is noted by Mkhwanazi and Manderson (2020), the postulation that the biological mother will be – and should be – the main caregiver of her children is rooted in understandings of gender that are common across different populations in South Africa. The preparedness, competence and capacity of mothers to provide care to children are generally taken for granted, with an assumption that new mothers will also be supported by older and experienced kin (Spaul, Daniels, Ardington et al., 2021). This yoke of care is aggravated in situations where biological fathers are absent, which has been a worrying phenomenon in South Africa for some time. It should be noted that in 2018, 11% of children (roughly 2 million children) did not have a living father (Hall, 2019).

Recent studies have revealed that when fathers are affectionate and supportive, it greatly affects a child's cognitive and social development (Adamsons & Johnson, 2013). According to Jessee and Adamsons (2018, p.2) "active involvement on the part of the father promotes positive development and outcomes for children". The patterns a father sets in the relationships with his children will dictate how his children relate with other people both in childhood and into adulthood (Jessee & Adamsons, 2018; Adamsons, 2013; Mallers et al., 2010; Seiffge-Krenke, Overbeek, & Vermulst, 2010).

Although the school readiness literature typically focuses on a couple of years before primary school entry, families prepare their children for formal education.

Having stated the above, Munnik and Smith (2019) further postulate that there are four major groups of factors that affect school readiness. These groups are distinguished as follows:

*Community:* Firstly, community factors thematically identified were unemployment, socioeconomic status (SES) and culture as impacting school readiness. This research study is located in a rural setting where the rate of unemployment is high. Although it is a rural area, Mandlankala is located in UMhlathuze Municipality, in the city of Richards Bay. The cost of living is high and impacts negatively on the ability of parents to provide for their children. Subsequently, the environment under which children grow becomes unfavourable thus negatively impacting school readiness.
*Adverse Experiences:* Secondly, adverse experiences included violence, trauma and substance abuse that affect school readiness. There is a usually strong relationship between unemployment and social ills. Unemployment in the area of Mandlankala has the ability to impact the SES of the community.

*Educational Factors:* Thirdly, educational factors identified are lack of stimulation, barriers to learning, teacher support and cooperation between stakeholders that influence readiness. Children in the early years need stimulation so that they attain cognitive, physical and emotional growth and development. This makes them ready for school. Attending preschool makes it easier for ECD practitioners to identify learning difficulties and allows for early intervention.

*Familial Factors:* Fourthly, familial factors such as parental support, variation in child-rearing practices and caregiver literacy exert influence on school readiness. The involvement of the family cannot be overemphasised. Parental involvement goes beyond affording a child the opportunity to go to school. It also involves supporting the learning that happens in ECD centres as well as beyond the school walls. The home as well needs to be a teaching and learning environment.

In light of the four factors mentioned above as stated by Munnik and Smith (2019), Figure 3.2 below reiterates that there is no glaring single factor that impacts school readiness but several factors which can exist independently or jointly.



Figure 3.2: Themes that impact school readiness Source: Munnik and Smith (2019)

Over and above what has been mentioned, the provision of good quality water sources, sanitation and adequate hygiene practices are essential for the survival and development of children (Darvesh et al. 2017). Children under the age of five years are the most affected as they are prone to water-borne diseases, especially diarrhoea. It is estimated that over 800,000 children die annually from preventable diseases caused by poor water, lack of sanitation and poor hygiene (UNICEF, 2016).

# 3.8 HEALTH AS A DETERMINANT OF SCHOOL READINESS

Literature suggests that for a learner to be ready for school, he/she should be healthy. As stated in Chapter 1 of this study, the current definition by the WHO that was formulated in 1948 (p.1) describes health as "a complete state of physical, mental and social well-being and not merely the absence of disease or infirmity." This definition has gained popularity over the years. Situated at Harvard University, the Centre on the Developing Child (2010) states that "health in the earliest years - actually beginning with the future mother's health before she becomes pregnant - lays the groundwork for a lifetime of well-being…" (p.1)

Global literature reviewed postulates that physical health, nutrition and enough sleep support sensory and perceptual development of learners. The following aspects as facets of health that are important for school readiness were realised:

*Physical Health:* Literature suggests that learners who access ongoing health care have better school attendance and are more engaged in learning. Consistent attendance helps learners prepare for school. This is supported by scholars who state that there is a "positive linkage between school attendance and academic performance" (Sekiwu, Ssempala & Frances, 2020, p. 159).

*Oral Health:* Reviewed literature advocates that learners who have healthy teeth are more comfortable during learning. The daily routine of brushing teeth promotes oral health hygiene. Duijster et al. (2015, p.1) suggest that "dental professionals, child health centres and other institutions work closely together to promote children's oral health".

*Nutrition:* Good nutrition is essential for children's brain development. According to Okeyo et al. (2020, p. 2) "adequate nutrition plays an important role in ensuring optimal growth and development in children and adolescents". Learners who have access to nutritious food have the energy to learn. Providing healthy snacks and meals helps learners' bodies grow, giving them what they need to engage fully in the learning environment.

*Physical Activity and Motor Development:* Staying active benefits young learners' physical development. Activities that get learners moving build motor skills that are useful for physical well-being. According to Ostrosky et al. (2018, p.39) "the early years are the ideal time to support the physical activity level of children while also addressing readiness skills".

*Sleep and Rest:* For learners to function well in any learning environment, they need enough sleep and good sleeping patterns. Schlieber and Han (2021, p.1) state that "establishing healthy sleep practices during early childhood is essential for healthy development and well-being, both in the short term and the long term". It is, therefore, sensible that many ECD programmes have scheduled times for a nap, rest, or quiet activities.

# **3.9 GRADE R IN SOUTH AFRICA – HOW DOES IT WORK?**

The core function of ECD is to redress the injustices of the past by eliminating socioeconomic inequality in our country (Rudolph, Millei, & Alasuutari, 2019 & Kotzé, 2015). Lipscomb et al. (2019) postulates that in South Africa, Grade R was introduced to eradicate the said injustices and bring equity where necessary. Grade R is a compulsory reception year whose establishment was proposed through White Paper 5 on Education and Training in 1995 (DoE, 1995). This proposal came just after the first democratic elections as one of the earliest interventions to eradicate poverty and social imbalance in the country. In South Africa, Grade R is a single year preschool programme planned for five-year-old learners before they enter Grade 1. It is part of the Department of Basic Education's National Curriculum that prepares children officially to become learners in the language of schooling (Samuels et al., 2015). The South African Institute for Distance Education (SAIDE) (2010) defines Grade R as "the last year of children's early development before they commence their formal schooling in Grade 1" (p.1). In South African schools, Grade R is the first grade in the General Education and Training band at the Foundation Phase which has the same curriculum components or guidelines as any other grade. In Grade R, learners move from mostly unstructured learning to structured learning, where they learn to sit quietly and have structured lessons with a formal curriculum for the first time.

Preschool class lays an important foundation for children's education "because the first years of life are the years when investments are made for the future of societies, the losses that occur in this period are either hard or impossible to compensate" (Kartal, Balantekin, & Bilgin, 2016, p.80). The Grade R curriculum was first outlined in the Revised National Curriculum Statement R-9 (DoE, 2002), as part of the F P Curriculum. In 2010, the (CAPS) (DBE, 2011) documents were first implemented for Grade R. A child must be at least five years old to be registered for Grade R and must turn at least five on 30 June of his/her Grade R year.

# 3.10 CHALLENGES FACING THE NURTURING OF LEARNERS' WELL-BEING IN ECD CENTRES

This study deems it important to discuss challenges facing the ECD sector in South Africa because it is during ECD years that the physical well-being of learners should be nurtured. Petersen and Petker (2012) opine that in the context of South Africa, the greatest need is for teachers in the Foundation Phase, which includes ECD practitioners, to receive adequate training that will enable them to help children develop holistically. These teachers provide the foundation upon which the rest of the schooling sector is built, and they hold the key to unlocking the educational potential of a developmental state. Bipath and Joubert (2016) are of the view that ECD practitioners can be emancipated if high-quality programmes for practitioners are implemented.

"The ECD sector is very poorly resourced, practitioners are paid low salaries, and there is great inequality in the sector" (DoE, 2001). Wallet (2006, p.34) notes that the many ECD practitioners across the country are females. Further, it is maintained that their low remuneration can be attributed to their inferior status, since caring for young ones is viewed as an extension of the females' familial role and that caring does not require professional skills (Ackerman 2006, p.99). Generally, the price of service is related to the quality of that service. According to Wu et al. (2011), price is the value expressed in a currency or medium of exchange for a particular product. Service quality can be identified by comparing consumers' perceptions of the services they actually receive with the services they actually expect/want on the service attributes of a company. Therefore, as ECD practitioners are poorly paid, they are not motivated to give the best service. In Africa as a whole, there is a perception that women cannot do challenging and demanding jobs, which applies to the ECD sector too. This has political

inferences. The mere fact that ECD has more female practitioners than male practitioners makes the status and quality of the practitioners to be low.

# **3.11 CHAPTER SUMMARY**

In this chapter, early education practices associated with school readiness were discussed. They include ready children, ready schools, and ready families. Grade R was conceptualised. Literature also revealed that school readiness is threefold. It comprises firstly; intellectual readiness, secondly; social readiness and thirdly; physical readiness. However, a great deal of the literature on the development of young learners and readiness orientates around the work of Urie Bronfenbrenner (1917-2005) who conceptualised development as occurring within a set of embedded contexts, from the child's most immediate environment to institutions and relationships that influence that environment, and beyond to the broad social and cultural traditions, beliefs, and practices that help shape daily life and interactions. This leads to the next chapter where Bronfenbrenner's Ecological Systems Theory will be discussed in-depth as it is the theory that underpins this study.

#### **CHAPTER FOUR**

## **THEORETICAL FRAMEWORK**

## **4.1 INTRODUCTION**

In the first chapter, the problem under investigation was introduced and highlighted in terms of its nature and scope. The background to this study was also provided, and operational terms were defined. Furthermore, the aims and objectives of the study as well as research questions were outlined. In the second chapter, a critical review of literature related to physical well-being and school readiness was presented. This chapter will examine the theoretical framework utilised in this study.

Based on the understanding that a theory can be described as a general framework which comprises organised ideas that can be used to explain certain behaviours and observations which may result in the discovery of new phenomena and connections (Dohertyv et al., 1993; Smith & Hamon, 2012; White & Klein, 2008), I have decided to use Bronfenbrenner's ecological systems theory (1979) to underpin the study. This theory scrutinises the behaviour of human beings within their environment (Paquette & Ryan, 2001).

This chapter focuses on exploring the aspects of the theoretical framework of the study. The purpose of this chapter, therefore, is to provide a theoretical understanding of the physical wellbeing of four-year-old learners and their readiness for Grade R. The bio-ecological systems theory by Urie Bronfenbrenner (1979) forms the theoretical underpinning of this study. A comprehensive description of bio-ecological systems theory is provided. To understand this framework, it is important to highlight the significance of the environment under which a learner finds himself/herself. Before the development of Bronfenbrenner's ecological systems theory, research on the development of children was viewed and conducted as "the science of the strange behaviour of children in strange situations with strange adults for the briefest possible periods of time" (Bronfenbrenner, 1977, p. 513; 1979, p.19). The findings and results of studies conducted under such traditional, old-fashioned and stringent settings could not have been trustworthy. This study is conducted in an environment. The importance of the environment cannot be overemphasised in this regard. When discussing the environment, there has been a roving debate about 'nature and nurture' as far as human development is concerned. Nature slackly refers to that which a human being inherits in terms of biological make-up while nurture is about environmental experiences (Santrock, 2008). When one tries to roughly conceptualise the rift between nature and nurture, nature in human development refers to involuntary stages of growth that are genetically influenced while nurture looks at systems that are occupied by a human being (Garcia, Bearer, & Lerner, 2004; Singh, 2012). Biological and ecological factors are both considered to play a pivotal role in the existence and development of human beings (Gottlieb, Wahlsten, & Lickliter, 2006).

The idea of environmental influence in human development came into eminence in the eighteenth century based on three propositions: Firstly, that development does not take place out of context. This is supported by Bate (2014, p. 3) who posits that nothing exists, and therefore can be understood, in isolation from its context, for it is the context that gives meaning to what we think and do; Secondly, that development occurs in an ongoing, reciprocal process of interaction with the environment; and that functioning is determined by reciprocal interaction between psychological, biological, and environmental factors (Magnusson, 2005). Environmental conditions, such as interventions by ECD centres and parents, resources found at ECD centres, and support systems are crucial in learner development (Feldman, 2003).

# 4.2 THE ORIGIN OF THE ECOLOGICAL SYSTEMS THEORY

Through the original theoretical model of human development, called the ecological systems theory, Bronfenbrenner identified the need to understand individuals' development within their environments (Berk, 2000). The development of a child does not take place in a vacuum; there are many variables such as the home, ECD centre and school and the wider community that impact how development and growth emerge. This growth begins at home and extends to a more formal setting like an ECD centre. Wong Ngai Chun (2003) likens this progression to an 'ecological shift' from home to a formal setting. This study emphasises the importance of understanding a four-year-old learner in his/her environment.

Bronfenbrenner's theory underwent a process of evolution from being ecological to bioecological. Rosa and Tudge (2013) describe the evolution of Bronfenbrenner's theory over three phases. *Phase 1* (1973–1979) culminated in the publication of 'The Ecology of Human Development (1979).

*Phase 2* (1980–1993) saw almost immediate modifications to the theory, with more attention paid to the role of the individual and greater concern with developmental processes.

*In Phase 3* (1993–2006), proximal processes were defined and placed at the heart of the bioecological theory, and from 1998, the Process-Person-Context-Time (PPCT) model was described as the theory's appropriate research design. Given the extent of these changes, and to avoid theoretical incoherence, this research is based on Bronfenbrenner's theory and not a specific version. To conceptualise environmental contexts, Bronfenbrenner firstly described four ecological systems:

**Microsystem** is the innermost layer of Bronfenbrenner's model. This context is closest to an individual and encompasses interpersonal relationships and direct interactions with immediate surroundings (Berk, 2000). This system comprises "a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given face-to-face setting" (Bronfenbrenner, 1993, p.15). Families can play a fundamental role in the development of a child (Bronfenbrenner, 2005a; Moon, Jurich, & Feldhusen, 1998; Olszewski-Kubilius, 2008). This study considers family members and the ECD centre in Mandlankala area as part of the microsystem. Chyu, Pebley, and Lara-Cinisomo (2005) state that the company of grandparents and other members of extended family living with a nuclear family may bear desired results in terms of childcare. Allen and Kelly (2015) state that early child development is mainly reliant on relationships with considerate adults who are willing to train the child. The influence of the direct setting in which children live is related directly to the interactions and nature of relationships with family, peers, school environments, community, and social supports (Levanthal & Brooks-Gunn, 2000).

**Mesosystem:** Bronfenbrenner refers to this system as "a system of microsystems" (1976, p. 163; 1977a, p.46; 1979b). It includes connections between various aspects of the microsystem. This system "comprises the linkages and processes taking place between two or more settings containing the developing person" (Bronfenbrenner, 1993, p.22). This study considers the relationship between a learner's family and the ECD centre as a mesosystem because these two directly influence the development of a learner (Berk, 2000). Individuals learn how to act in

different settings and around different people based on what behaviours they perceive are required in each context (Harris, 1999).

Although home and the ECD centre are both microsystems, a learner may behave in a totally different manner in both these systems. The most noteworthy clashes between settings of a developing child likely occur between home and the ECD centre. Baker (1997) refers to this as 'home/school disarticulation', where rules, standards, and principles within the family unit differ from those of the education system. If totally dissimilar principles are set in different microsystems, disarticulation between settings is most likely to occur between home, the ECD centre, and possibly peer groups. Therefore, this study is of the view that the two settings should work in unison. When these microsystems diverge significantly, contradictory directions regarding suitable ways to 'act' in each context can result (Baker, 1997). It is therefore important for different microsystems to work together for the betterment of a developing child. Inconsistent messages from ECD centre, home and peers may serve to impede the development of a child. Conversely, the conditions for favourable child development can be maximised when parents, peers, and school environments align (Subotnik, Olszewski-Kubilius, & Arnold, 2003). School settings must identify and nurture children who may experience disadvantages due to the environments they occupy (Burney & Beilke, 2008; Duncan & Brooks-Gunn, 2000; Fletcher & Dwyer, 2008; Kitano, 2007; McLoyd, 1998; St. John & Wynd, 2008).

**Exosystem:** this system does not directly affect individuals; rather, the exosystem encompasses aspects of structures within the microsystem (Berk, 2000). It comprises "one or more settings that do not involve the developing person as an active participant, but in which events occur that affect, or are affected by, what happens in the setting containing the developing person" (Bronfenbrenner, 1979b, p.25). Examples of these include financial difficulties within the family such as parental job loss that may affect a child, but do not involve the child directly. A further example is the work lives of parents, which can affect household resources and stress levels that impact interactions between parents and their children (Subotnik et al., 2003). Government departments, such as the Ministry of Education are yet another example of an environment within the exosystem. Decisions they make about educational programmes to be followed in ECD centres can affect the lives of developing children when they filter down to the school level.

Within the exosystem, Jencks and Mayer (1990) identify five theoretical frameworks for linking individual behaviour, educational outcomes, and well-being with neighbourhood effects. The first of these, *neighbourhood institutional resource models*, proposes that healthy development is promoted by the presence of and access to resources within a community, such as libraries, parks, and community services. This study indicates that parks may play a significant role in learner development. While they provide a recreational aspect through play, the physical wellbeing of four-year-old learners may be enhanced through activities that may be performed in parks. Second, *collective socialisation models* posit that community social organisation in the form of adult role models, supervision, structure, and routines impact individual outcomes. *Contagion models* suggest that the negative behaviour of peers and adults spreads within a community. *Competition models* propose that neighbours compete for community resources that may be scarce. Finally, *relative deprivation models* suggest that individuals evaluate themselves and their situations relative to their neighbours or peers.

Three key mechanisms through which individuals are potentially influenced by their neighbourhoods are outlined by Levanthal and Brooks-Gunn (2000). *Institutional resources* include the availability, accessibility and affordability of resources such as activities, educational and medical services, and employment opportunities present in the community. These resources can act as a source of learning stimulation or promote physical and mental health and socioemotional well-being (Fauth, Roth, & Brooks-Gunn, 2007; Haney, 2007). *Relationships* include aspects such as support networks, parental characteristics and behaviour, and the quality of the home environment. Social interactions and support available within the neighbourhood can serve to reduce parental stress and ultimately influence child outcomes. *Norms* or *collective efficacy* refers to the extent of social organisation and order within a community, as well as the presence of physical risk. Collective efficacy is critical for building social capital and establishing social control that can minimise the effects of structural disadvantage and delinquency or problem behaviour (Bandura, 1982; Fauth, Roth & Brooks-Gunn, 2007; Sampson, Morenoff, & Gannon-Rowley, 2002).

**Macrosystem** is the outermost layer of Bronfenbrenner's model. This system includes social or cultural ideologies and beliefs that affect an individual's environment (Bergen, 2008; Eriksson, Ghazinour, & Hammarström, 2018). Bronfenbrenner suggests that individuals constantly interact with these systems. The macrosystem comprises "the overarching pattern of micro- meso- and exosystems characteristic of a given culture, subculture, or other extended

social structure" (Bronfenbrenner, 1993, p.25). Bergen (2008) posits that both individuals and their environments constantly affect one another. However, in this original model, Bronfenbrenner recognised there was not enough focus on individuals' own role in their development, he realised that the individual was overlooked in other theories of human development, which were largely focused on the context of development (e.g., the environment) and thus began further developing this model (Tudge et al., 2009).

Ettekal and Mahoney (2017, p.3) refer to the above initial formation of Bronfenbrenner's ecological systems theory as a "classic rendition" as it contains the first four of the interrelated types of the environmental systems.

## **4.3 THE BIO-ECOLOGICAL SYSTEMS THEORY**

Urie Bronfenbrenner's theory construction (Bronfenbrenner, 1979, 1999; Bronfenbrenner & Morris, 1998; Bronfenbrenner & Morris, 2006) began with the ecology of human development and evolved as a bio-ecological model that comprises a process, person, context, and time framework (Griffore & Phenice, 2016). It is a theoretical perspective that views human development as a person-in-environment context as it uses different types of relationships and surroundings of an individual to help explain their development (Berk, 2000). Bronfenbrenner (2005) postulates that over the life course, human development takes place through processes of progressively more complex reciprocal interaction between an active, ever-evolving human organism and the persons, objects, and symbols in its immediate external environment.

It is important to clearly understand the structure of human ecology as posited by Urie Bronfenbrenner. Bronfenbrenner (2005, p.1) described the structure of the human ecology as taking place within "a series of nested and interconnected structures". Initially named the ecological systems theory, addressing the learner's environment and surroundings, the theory was modified in 1994 by recognising the learner's biological disposition that speaks to temperament and nature and combining it with environmental forces, resulting in renaming it bio-ecological systems theory (Kaakinen et al., 2010). The theory consists of five environmental systems which affect a learner's growth and with which a learner interacts; the microsystem, mesosystem, exosystem, macrosystem and chronosystem (Bronfenbrenner, 1979; Rosa & Tudge, 2013).

This theory is about the interactions of structures within and between the four systems (Paquette & Ryan, 2001). It points out that while relationships close to the child have a direct impact; factors outside the close relationships also have a powerful impact on their development (Berk, 2007). External social factors all affect the learner's human development and behaviour (Bronfenbrenner, 1979), thus the environmental conditions a learner is exposed to whether positive or negative directly influence the child's development. Therefore, should any deficiencies occur in the child's environment, these deficiencies will show themselves, especially in adolescence as anti-social behaviour, lack of self-discipline, and an inability to provide self-direction (Addison, 1992).

## 4.4 THE MULTIPLE LEVELS OF THE BIO-ECOLOGICAL SYSTEMS THEORY

The ecological metaphor in bio-ecological systems theory refers to the positive, negative and neutral person: environment relationship (Bronfenbrenner, 2005). The main assumption is that people interact with each other and their environments on multiple levels i.e., micro-, meso-, exo-, macro-, chronosystem (Germain, 1991, 1976, 1973; Falls, 2011).

# 4.4.1 The Microsystem

The microsystem is the innermost level of bio-ecological systems theory and signifies the relations between learners and their immediate surroundings (Berk, 2000). The microsystem involves processes such as activities, roles, and interpersonal relations experienced by the child, which take place within the child's immediate environment (Guhn & Goelman, 2010). This system encompasses intimate contacts in which the child has interpersonal connections, such as family members, special events and critical events, which often serve as the child's point of reference (Bronfenbrenner, 1977). I decided to utilise the words child and learner interchangeably in the home and ECD centre/school setting, respectively.

Home is an environment in which parents mould their children so that they will become rounded citizens in future. Therefore, communication in a family setting is important so that parents can relay their expectations and the child understands and carries out desired actions. This study seeks to see the home as an environment that works to enforce the growth and development of a child. Other structures in the microsystem include school, childcare environments, caregivers, peers, neighbourhoods, religious communities, to name a few (Paquette & Ryan, 2001). The aforementioned structures have a role to play in the life of a child who is developing.

In this study, the ECD centre in Mandlankala area is a microsystem where a learner interacts with peers, caregivers and /or childcare practitioners. At the age of four, learners can express their needs with words and can understand instructions. Their budding physical skills may expand their play and increase their confidence and physical well-being.

Furthermore, how a learner acts or reacts to the people in the microsystem will affect how they treat him/her in return (Bridges, n.d.). At this level, relationships have an impact in two directions - both away from the learner and toward him/her. For example, a child's parents may affect his beliefs and behaviour; however, the child also affects the behaviour and beliefs of the parent (Paquette & Ryan, 2001). This is known as bi-directional influences, and it occurs among all levels of the environment (Bronfenbrenner, 1990).

At the microsystem level, bidirectional influences are strongest and have the greatest impact on the child because relationships are close and personal. Therefore, relationships in the microsystem are particularly important to nurture so that a lot of good may come out of them. Family is a social institution that provides a foundation in which children learn how to navigate and fit into society and it forms the most intimate microsystem for children (Paat, 2013). In these family settings, children experience their day-to-day reality and immediate socialisation. Han (2008) describes the family environment as the most important factor in learning and development for children. Microsystems are, however, not identical as the influence of one may outweigh the others, for example, the effect that a family exerts may supersede the influence of peers or vice versa, depending on the developmental milestones of the children (Paat, 2013). Paat (2013) adds that as the children get older, the number of their microsystems also expands, and they become active players in their environment. They can learn to distinguish between how they behave at home and in a class situation. They know what is expected of them at home and school. At the same time, teachers and parents learn how to interact with different children, based on their unique personalities and needs.

Bronfenbrenner (2005) states that in some cases, educational influences are proximal, meaning they have a direct impact on children. Bronfenbrenner and Ceci (1994) suggest that proximal processes (a) are the mechanisms through which developmental potentials are realised and (b) employ a more prevailing influence on developmental outcomes than contextual factors. In this study, proximal influences include the ECD practitioner's and parent's conversations and their following up with assistance in the classroom and at home. Another example of enduring patterns of proximal processes in the life of a developing four-year-old learner would be parentchild interactions. Other educational influences are distal, meaning their influence on children is more indirect. In this study, distal influences may include the ECD practitioner and parent's adherence to a conference schedule set by the ECD centre principal and discussion of academic standards set by the Department of Education.

According to the bio-ecological systems theory, if the relationships in the immediate microsystem break down, the child will not be equipped to discover other parts of his/her environment (Addison, 1992). Children looking for the affirmations that should be present in the child-parent relationship may look for attention in inappropriate places. Addison (1992) explains that the lack of affirmations becomes deficiencies, which show themselves when the child becomes older. This study supports that the home as an immediate microsystem should provide a solid foundation for development and growth so that other microsystems can build on it.

As the bio-ecological systems theory is based on the belief that the primary relationship needs to be with someone who can provide a sense of caring that is meant to last a lifetime, in the context of this study, parents should play a meaningful role in the development of their children. It is, thus, in the best interest of society to lobby for political and economic policies that support the importance of parents' roles in their children's development (Paquette & Ryan, 2001). The bio-ecological systems theory also promotes the idea that we should foster societal attitudes that value work done on behalf of children at all levels; parents, ECD practitioners/teachers, extended family, mentors, work supervisors, and legislators (Paquette & Ryan, 2001). This theory has implications for the child's school environment knowing about the breakdown occurring within children's home and family environment (Paquette & Ryan, 2001). This study suggests that should there be any unbecoming situation in a family setup, the school should be made aware so that a learner receives appropriate attention and support. However, ECD centres and practitioners can easily fulfil an important secondary role but cannot provide the complexity of interaction that primary adults such as parents can provide.

#### 4.4.2 The Mesosystem

The mesosystem is the next layer in the ecological context and consists of a network of microsystems (Bronfenbrenner, 1977). This layer provides the connection between the structures of the child's microsystem (Berk, 2000). It looks at the interaction between the

different parts of the microsystem, for instance, how parents interact with ECD practitioners and teachers in developing a child. This study asserts that the different microsystems of a child do not function independently but are interconnected and intertwined to assist a child who is emerging. The mesosystem represents the connections among two or more microsystems in which children are active participants, such as transactions and interactions between the family and their peers (Paat, 2013). This ecological setting, which functions as a linkage between two lower-level ecological settings, can jointly influence children's social outcomes in society (Bronfenbrenner, 1977).

The linkages and processes occur continuously between the two or more settings containing the developing child. The mesosystem therefore may include the school and family; the church and family; the community and family (Guhn & Goelman, 2010). The lack of meaningful connection and participation between the child's teacher and his parents, between his church and his neighbourhood, within the mesosystem may lead to negative child development outcomes and behaviours (Paquette & Ryan, 2001).

Studies by LaBahn (1995); Mutodi and Hlanganipai (2014) and Ntekane (2018) concur that parents' involvement may help to ensure improved academic results and the child's overall growth. Contrary to that, if the child's parents provide no assistance or interest in the child's schooling, this may hinder the child's growth in different areas such as poor academic performance, negative view of school and an overall negative relationship with the school. Parental monitoring is directly associated with positive child development and academic performance (Bronfenbrenner, 1999). Furthermore, Compton (2016) suggested strategies for increasing parental involvement for primary school learners. In the mesosystem, the interactions may not be as direct to the child as in the microsystem, but they assert influence on each other for the betterment of the child. A relationship between an ECD centre and parents should exist and be cemented by parents' active involvement in school activities, including attendance of teacher/parent meetings and sports days. If a child witnesses a good relationship between his/her two microsystems, he/she is most likely to develop desirably than if the microsystems are working against each other.

# 4.4.3 The Exosystem

The exosystem incorporates remote social settings that have an indirect effect on children such as children's neighbourhood, the parents' support network, parent's workplace, and the broader society (Bronfenbrenner, 1986; Paat, 2013). This is a system that is outside of a child's boundaries and therefore a child is not an active participant in the system. These could be people or places that the child may not interact with often but have a huge impact on the life of a child. Here, a child gets affected by decisions made outside of his/her setting (Bronfenbrenner, 1999). In this study, parents move from rural Mandlankala area to look for employment in the urban Richards Bay. This means that most parents work far from home and are often away. This causes a child to get anxious about when he/she will see his/her parent again and that may interfere with a child's development. In this case, a parent's workplace becomes a child's exosystem. Another example would be service providers who have the best interest of developing children at heart. They may include social workers and health practitioners who visit children in ECD centres from time to time. The vision and goals of the social workers and health workers should be an extension of those of ECD practitioners, parents and caregivers.

The exosystem encompasses the linkages and processes taking place between two or more settings, at least one of which does not ordinarily contain the developing child, but in which events occur that influence processes within the immediate setting that contains the child (Guhn & Goelman, 2010). These may include processes taking place between a child's home and a parent's workplace. The child may not be directly involved at this level, but they do feel the positive and or negative force involved with the interaction with their own system (Paquette & Ryan, 2001). Thus, if the child's father receives a promotion and a raise at work, this may have a positive effect on the child because his/her parents will be better able to provide for the child's physical or material needs (Bridges, n.d.).

This study asserts that if a child's father loses his job, it may have negative effects on the child if his/her parents are unable to pay rent, pay school fees or buy groceries. At this level, it is also important for parents to maintain positive working relationships in their workplaces; should they need support from their employer such as time off from work to care for their sick children. In the case of an absent father, greater pressure is placed on the single mother to work longer hours; support is required from the employer to adjust the work schedule of the mother to suit the child's needs.

## 4.4.4 The Macrosystem

The next system is the macrosystem which is broadly defined by Bronfenbrenner (1977) as the large overarching set of social laws and government, the economy, wars; that incorporate the

microsystem, mesosystem, and exosystem (Berk, 2000; Guhn & Goelman, 2010; Paat, 2013). Children's outcomes are influenced by the historical period and the era in which they develop and mature (Paat, 2013). The macrosystem is a set of things or places that seem extremely far from a child's daily life but has great influence over his/her life.

Such things or places may affect the child negatively or positively. These include the economy of the country, the state of affairs in the government, culture, etc. With regards to culture, Tylor (1871) asserted that "Culture is that complex whole which includes knowledge, belief, arts, morals, customs, laws and other capabilities which are learned, shared by men as members of society, and transmitted from one generation to another" (cited in Wahab, Odunsi, & Ajiboye, 2012, p.1). However, any carelessness exhibited by its custodians would result in rapid erosion and disappearance of the uniqueness of the people and their culture (Wahab, Odunsi, & Ajiboye, 2012). This reinforces the role of the parents within the child's microsystem to first learn and then share the essential yet positive qualities of their culture. Furthermore, the effects of larger principles defined by the macrosystem have a cascading influence throughout the interactions of all other layers.

For example, if it is the belief of a certain culture that parents should be solely responsible for raising their children, that culture is less likely to provide resources to help parents. The macrosystem is the genealogy and nucleus of society. It looks at the culture of a society and distinguishes it between the cultures of other societies and comprises the most distant collection of people whose thinking and decision making may affect a child directly. Although South Africans share the values of democracy, they come from different religious and cultural backgrounds. Subsequently, one can argue that nested within our South African macrosystem are subculture macrosystems.

The socio-economic state of the government plays a huge role in early childhood education. Lack of adequate funds would mean that ECD practitioners are not adequately trained. This would also manifest in a lack of clean, drinkable water, poor sanitation, no suitable furniture for children, no suitable play material, and no teaching and learning material. All of this would result in a lack of sustainable teaching and learning environment and would jeopardise the implementation of the early childhood curriculum as a whole. The macrosystem is large and remote to a child, however, it has a great influence over the child (Bridges, n.d.). When governments engage in two related efforts; promoting parenthood and promoting and encouraging healthy marriage (Jordan-Zachery, 2009), parental involvement has been reported to be associated with social and cognitive development, psychological well-being and academic performance of children (Downer & Mendez, 2005). Parental involvement also has a stronger effect on adolescent happiness (Flouri & Buchanan, 2003). In linking the current study to the macro-system, it is in the best interest of both government and the child to develop policies and laws and to foster a culture that encourages parental involvement.

## 4.4.5 The Chronosystem

The chronosystem was not part of the original model but was later added as part of the evolution of the initial phase of the theory. The chronosystem, in particular, emphasises life transitions and individual changes through time such as children's transition to adulthood, and major life changes over time (Bronfenbrenner, 1979, 1986, 1994; Tudge et al., 2009; Paat, 2013). Chronosystem is "the influence on the person's development of changes (and continuities) over time in the environments in which the person is living" (Bronfenbrenner, 1986, p.24). In addition, Bronfenbrenner defined the chronosystem with reference to a lifespan perspective on development, stating that developmental effects of proximal processes may critically depend on when and in which order they happen in the child's life, as well as on when they happen within the historical context (Guhn & Goelman, 2010).

This system encompasses the dimension of time as it relates to a child's environment. Elements within this system can be either external, such as the timing of a parent's death, or internal, such as the physiological changes that occur with the aging of a child. As children get older, they may react differently to environmental changes and may be able to determine how they will be influenced by that change (Paquette & Ryan, 2001).

The application of the chronosystem on this study and corroborated by Taylor et al. (2013) proves that beyond the procreative act (which took place during one dimension of time), parenthood involves childrearing activities, duties and responsibilities that parents and partly ECD practitioners are expected to perform. Performance of such duties, according to Taylor et al. (2013), takes place across the childhood period of the development. High quality of father involvement is beneficial to children's well-being and development even when provided by a non-resident father (Amato, 2004; King & Sobolewski, 2006).

Children with involved parents over time have higher levels of social competence and capacity for empathy, greater self-control, higher self-esteem, more positive child-father relationships, better social skills and peer relationships, more social sibling interactions, increased cognitive competence, fewer school adjustment difficulties, better academic progress, and fewer behaviour problems (Lamb & Lewis, 2010). If one domain of a child's well-being is intact, it somehow has a ripple effect on the other well-being domains of a child over time. Masten and Cicchetti (2010, p.492) affirm that "effectiveness in one domain of competence in one period of life becomes the scaffold on which later competence in newly emerging domains develops... competence begets competence." The chronosystem becomes applicable as it emphasises that parents, as well as ECD practitioners, have a valuable, nurturing role to play in the development of well-being in the lives of children.

## 4.5 SUBSEQUENT ADDITION OF THE CHRONOSYSTEM

Bronfenbrenner was a very self-assessing theorist who continuously evaluated his work and objectively regularly noted the changing nature of his theory. For example, he wrote: "I have been pursuing a hidden agenda: that of re-assessing, revising, and extending - as well as regretting and even renouncing - some of the conceptions set forth in my 1979 monograph" (Bronfenbrenner, 1989, p.187). The chronosystem was not initially a part of Bronfenbrenner's ecological systems theory. Further development of the model took place by adding this system, which refers to how the person and environments change over time. This study acknowledges that as a learner develops and undergoes growth, he/she changes over time. The chronosystem, included in Bronfenbrenner's (1979) model, represents the patterning of events and transitions that occur throughout an individual's life.

Rosa and Tudge (2013) classify Bronfenfenbrenner's ecological systems theory of human development (1973-2006), based on three phases. These phases are discussed later in this chapter when I look at the proximal process in the development of a child (See 4.7).

#### **4.6 THE INDIVIDUAL**

According to Allen (2010, p.3) Bronfenbrenner's ecological systems theory is based on the premise that "...all individuals are part of interrelated systems that locate the individual at the centre and move out from the centre to include all systems that affect the individual". An individual, therefore, does not operate in a vacuum but is shaped by surrounding circumstances,

events, timeframes and so forth which link with the hypothesis of Bronfenbrenner (1995) which states that human development is the product of an interaction among process, person, context and time. At the centre of the ecological framework is the individual and his or her personality, genetic endowment, and other personal factors (Subotnik et al., 2003).

These aspects serve to make the individual unique and impact features such as personality and self-concept. Much like resilience research, Bronfenbrenner's more recent addition to his ecological model adds biological influences on this theory (Bronfenbrenner, 2005). These biological influences include aspects of heredity, the shaping of the brain by the environment (plasticity), and the impact of these on hormone levels and heightened levels of arousal. As noted earlier, various personality traits have been linked with gifted individuals and these also influence how their talents develop. As well, self-concept and significant transitions or turning points impact outcomes for the gifted young person from financially challenging circumstances.

# 4.7. PROXIMAL PROCESS IN THE CHILD'S DEVELOPMENT

The bio-ecological systems theory is an evolving theoretical system for the scientific study of human development over time (Tudge et al., 2016). It incorporates a four-element model, involving the synergistic interconnections among process, person, context, and time, known as the Process, Person, Context, Time Model (PPCT Model). In other words, the four elements simultaneously influence development because they are part of an interactive system (Bronfenbrenner, 1999; Tudge et al., 2016).



**Figure 4.1:** A diagrammatic illustration of the process, person, context, time model **Source**: Bronfenbrenner (2001, p.10)

It is apparent from Figure 4.1 above that those four elements simultaneously influence development and that they are part of an interactive system (Bronfenbrenner, 1999; Tudge et al., 2016). The four elements as illustrated in Figure 4.1 above are described as follows:

**Process:** Bronfenbrenner viewed proximal processes as the primary mechanism for development, featuring them in two central propositions of the bio-ecological model, interactions with objects and interaction with people (Bronfenbrenner & Morris, 2006).

**Proposition 1:** Human development takes place through processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate external environment. To be effective, the interaction must occur regularly over extended periods. Such enduring forms of interaction in the immediate environment are referred to as proximal processes (Bronfenbrenner & Morris, 1998). Proximal processes are the development processes of systematic interaction between person and environment (Bergen, 2008). Bronfenbrenner identifies the group and solitary activities such as playing with other children or reading as mechanisms through which children come to understand their world and formulate ideas about their place within it (Tudge et al., 2009). However, processes function differently depending on the person and the context.

**Proposition 2** states that the form, power, content, and direction of the proximal processes effecting development vary systematically. It is viewed as a joint function of the characteristics

of the developing person in the environment in which the processes are taking place; the nature of the developmental outcomes under consideration; and the social continuities and changes occurring over time through the life course and the historical period during which the person has lived (Bronfenbrenner & Morris, 1998). The nature of proximal processes varies according to the aspects of the individual and of the context, both spatial and temporal; and as children grow older their developmental capacities increase both in level and range. Therefore, to continue to be effective, the corresponding proximal processes must also become more extensive and complex to provide for the future realisation of evolving potential to be lived (Bronfenbrenner & Morris, 2006).

**Person:** Bronfenbrenner acknowledged the role that personal characteristics of individuals play in social interactions (Bronfenbrenner & Morris, 1998). He identified three personal characteristics that can significantly influence proximal processes across the lifespan. Demand characteristics such as age, gender, or physical appearance set processes in motion, acting as personal stimulus characteristics (Tudge et al., 2009). Resource characteristics are not immediately recognisable and include mental and emotional resources such as experiences, intelligence, and skills as well as material resources such as access to housing, education, and responsive caregivers (Bronfenbrenner & Morris, 1998). Thirdly, force characteristics relate to variations in the individual's motivation, persistence and temperament (Bronfenbrenner & Morris, 1998). Bronfenbrenner notes that even when children have equivalent access to resources, their developmental courses may differ as a function of characteristics such as the drive to succeed and persistence in the face of hardship. In doing this, Bronfenbrenner provides a rationale for how environments influence personal characteristics, yet also suggests personal characteristics can change environments (Tudge et al., 2009).

**Context** involves five interconnected systems, which are based on Bronfenbrenner's original model, ecological systems theory. The microsystem describes environments such as home or school in which children spend significant time interacting. Mesosystems are interrelations between microsystems. The exosystem describes events that have an important indirect influence on development. For example, in a situation where a parent consistently works late, the development of a child may be affected (Bergen, 2008). The macrosystem is a feature of any group (culture, subculture) that share values and belief systems. The chronosystem describes historical circumstances that affect contexts at all other levels (Bronfenbrenner & Morris, 1998).

**Time** has a prominent place in this developmental model and consists of three levels: micro, meso, and macro. Micro-time refers to what is happening during specific episodes of proximal processes. Meso-time is the extent to which the processes occur in the person's environment, such as over the course of days, weeks, or years (Tudge et al., 2009). Macro-time (or the chronosystem) focuses on the shifting expectancies in the wider culture. This functions both within and across generations and affects proximal processes across the lifespan (Bronfenbrenner & Morris, 2006).

Bronfenbrenner and Ceci (1993) indicate that human development takes place through processes of progressively more complex reciprocal interactions between an active evolving biopsychological human organism and the persons, objects, and symbols in its immediate environment. A reciprocal nature of interaction exists and the key to understanding proximal processes and ecological processes in general is that the relationships of people with environments are bi-directional (Griffore & Phenice, 2016). A misconception of proximal processes is that they are simply the unidirectional effects of environments doing things to people and that proximal processes are only about social interactions.

Proximal processes are more than the interaction of two individuals in direct communication; they are also interactions with objects and symbols that make up the context. Proximal processes are also not limited to interactions with other people therefore the mere presence of other people in the immediate environment does not necessarily lead to the occurrence of a proximal process (Griffore & Phenice, 2016). Furthermore, proximal processes are not isolated events; rather they are reoccurring in nature with varying degrees of complexity, and they may be part of sequences (Bronfenbrenner & Morris, 2006).

Objects and symbols are processes such as family communication patterns and family organisational patterns exchanged between family members, and which help them with healthy functioning (Walsh, 2003). Regarding the current study, an example of these objects and symbols is that of a parent reinforcing practices such as the family all sitting down together at mealtime. This encourages physical well-being. Knowing how to sit will give a four-year-old learner the ability to be at a desk and practise controlling the movements in their shoulders, arms, hands, and fingers.

The bio-ecological systems theory has adequately demonstrated its applicability to the current study as it provides an interpretation of human behaviour highlighting the role of the parent in ensuring positive outcomes for childhood physical development. The social role theory complements the bioecological systems theory as it fits the description of human behaviour in the social environment, in that it focuses on interactions between and among individuals, groups, societies, and economic systems as developed by the social systems in which people live.

# 4.8. LIMITATIONS OF BRONFENBRENNER'S ECOLOGICAL SYSTEMS THEORY

Several scholars, including Goldhaber (2000); Guba and Lincoln (1994); Richters (1997); Tudge (2008); Winegar (1997) have argued convincingly that there should be a tight connection between one's theory, the methods that one uses, and one's analytic strategy. There have been few criticisms of Bronfenbrenner's theory, but the most noteworthy limitation of his ecological model is his inattention to biological influences and his limited emphasis on cognitive processes (Elder, 1995; Santrock, 2008). Bronfenbrenner himself recognised the limitations of his original ideas (Lerner, 2005). In more recent years, he addressed these criticisms by adding biological influences on his theory (Bronfenbrenner, 2005), although critics believe that this adjustment still does not fully address the limitations of the theory. Mönks and Mason (1993) state that ecological models neglect the recognition of inborn abilities and overlook the diversity of human characteristics that impact how individuals in the same environments might respond. The degree to which ecological approaches acknowledge notions of power, oppression, and marginalisation provides another avenue for critique (O'Donaghue & Maidment, 2005). Mönks and Mason (1993) suggest that environmental factors influence human development. Therefore, the systems under which a learner finds himself/herself influence the nature and/or rate of his/her development.

# **4.9 CHAPTER SUMMARY**

This chapter described bio-ecological systems theory and its relevance and applicability to this study. The bio-ecological systems theory is based on the foundation that the environment is an important force in development and the developing child is embedded in a series of complex and interactive systems. Bronfenbrenner's ecological theory describes and maps the various contexts and levels of settings that influence children's development (Bronfenbrenner, 1979). Bronfenbrenner holistically views child development as not just something happening to the

child but also happening to those who are involved in shaping them. There are also interrelationships amongst the different factors that influence the course or direction of child development. This development is determined largely by the relationships the child has with family, teachers, peers and the community and will differ from one cultural group to the other, bringing in variety and disparity in how transitions are made over time and space. A child cannot develop alone, as development affects not only the child but also adults who support him/her to make it easy and successful.

The environment and its immediate settings actively shape the outcome of a child's life. Within the microsystem, family members contribute to the functioning and maintenance of their families through providing care, stability, dependability and positive development. In view of the outer layers of the system all impacting the developing child, the role of good parenting which lays stable foundations cannot be over-emphasised as a breakdown in the immediate microsystem leads to a child not being able to develop resilience in interacting with the outer layers. Furthermore, the child's experiences are mainly centred on their parents, family, peers, church, school, neighbourhood and every one of these social factors has a role to play in the child's development in his micro-system.

There is a great deal of influence from external environments on the functioning of homes as a microsystem in the context of child growth and development. It cannot be ignored that the interaction of genetics and home environment with transitions and extensions to other major settings influencing developments like day-care, schools, peer groups, neighbourhoods and communities play a major role in child development. Special attention should be paid to external systems that may affect and be affected by the family/home microsystem. These are the mesosystem, the exosystem, the macrosystem as well as the chronosystem. Chapter 2 has provided a review of literature on child development in terms of the physical well-being of four-year-old learners and their readiness for Grade R. The next chapter will give a detailed description of the methodology used in the study. It will outline the research methods used including the research design, sampling methods, and a detailed description of the data generation methods, instruments, strategies of data analysis, and all the procedures that were deemed necessary for the success of the study.

# **CHAPTER FIVE**

# **METHODOLOGY, METHODS AND PROCESS**

# **5.1 INTRODUCTION**

The previous chapter presented a review of literature on the study. This chapter aims to explain the reasoning behind the approach to the research study. It elucidates the collection methods, methods of analysis, and other key points of the study. This chapter gives a detailed description of the methodology used in the study. It outlines the research methods used and this includes the research design, sampling methods and a detailed description of the data collection methods, instruments, strategies of data analysis, and all the procedures that were deemed necessary for the success of the study. The approach and methods employed in this study were guided by the following four research questions:

- i. What is the nature of practices ECD practitioners employ to enhance the physical wellbeing of four-year-old learners' readiness for Grade R?
- ii. How does the ECD Centre promote the physical well-being of four-year-old learners for their readiness for Grade R?
- iii. How are ECD practitioners pedagogically prepared to plan for the physical activities for four-year-old learners' readiness for Grade R?
- iv. Why do ECD practitioners prepare four-year-old learners' physical well-being and readiness for Grade R in the manner they do?

There are two important concepts in this chapter, namely, research design and research methodology. Research design is the total structure of the research study whereas research methodology is the various processes, procedures, and tools used to collect and analyse data. Therefore, research methodology is mainly about who you are going to collect data from (Participants), where the research is going to be conducted (Location of the study), how data is going to be collected (Research instruments), when data is going to be collected, what kind of data is going to be collected (Nature of the study) and why data is going to be collected (Purpose of the study) (Edwards & Holland, 2013; Kabir, 2016; Sutton & Austin, 2015). "Research methodology is a way to systematically solve the research problem. It may be understood as a

science of studying how research is done scientifically. In it we study the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them" (Patel & Patel, 2019, p.48). Participant observation and face-to-face semi-structured interviews were used as tools for data collection methods, not turning a blind eye to the researcher as a primary tool for the collection of data. Furthermore, the justification for each of the data collection methods used in the study was discussed. Finally, to ensure the trustworthiness of the research, appropriate criteria for qualitative research were discussed, and several methods that include member checks, triangulation and audit trail were suggested and later employed. Permission to conduct this study was granted by various, relevant bodies. Like any other research project, this study had its limitations which I acknowledge and discuss.

This chapter aims to look at the aspects of research design which include research methodology, research paradigm, research approach, data generation methods, sampling, data analysis, and rigour and quality in qualitative research. Ethical issues, as well as my role as a researcher in this study, will be discussed.

#### **5.2 RESEARCH DESIGN**

The research design is about the route I took when conducting this study. This study is a naturalistic enquiry (see 1.12.3) that seeks to understand human behaviour in terms of the physical well-being of four-year-old learners in relation to their readiness for Grade R. School readiness is more than academic knowledge. Readiness is multi-faceted and based on all aspects of development, including social, emotional, physical and intellectual development (Prinsloo & Reid, 2015; Erasmus, 2018).

#### 5.2.1 Research Methodology

This is an exploratory case study because it explores the physical well-being of four-year-old learners in relation to their readiness for Grade R. Yin (2003) as cited in Baxter and Jack (2008, p. 548) explains that an exploratory case study is used "...to explore those situations in which the intervention being evaluated has no clear, single set of outcomes..." The above citation substantiates the appropriateness of an exploratory case study for this enquiry. There are various ways in which research methods can be classified, however, one of the common distinctions is qualitative and quantitative research. In a nutshell, quantitative data is about quantities and measurements whilst qualitative data, such as human behaviour, is non-numerical (McLeod,

2019; Daniel, 2016; Noyes, Booth, Moore, Flemming, Tunçalp, & Shakibazadeh, 2019). This study is qualitative. According to Yin (2003), a case study design should be considered when: (a) the focus of the study is to answer "how" and "why" questions; (b) you cannot manipulate the behaviour of those involved in the study; (c) you want to cover contextual conditions because you believe they are relevant to the phenomenon under study; or (d) the boundaries are not clear between the phenomenon and context (Baxter & Jack, 2008, p.545). The case is defined by Miles and Huberman (1994) as a phenomenon of some sort occurring in a bounded context. A lot of what is known about empirical research has been a result of case studies (Biba, 2013; Ridder, 2017) because case study research seeks to explore, describe, or explain events or phenomena in a real-world context (Yin, 2014). Through such studies, the world gets to comprehend complex issues taking place in real-life settings (Harrison et al., 2017; Slight et al., 2011). This single unit of analysis called a case was not easy to determine. In this study, a case of a single Childcare and Early Education Centre in Mandlankala, Northern Zululand was explored in-depth. This single-case study included two groupings of participants: ECD practitioners and four-year-old learners. While I was considering what my research questions would be, I had to consider the case as well.

This centre was purposively selected as it caters for four-year-old learners as well as five-yearold learners who are doing Grade R. I did not choose to do a qualitative case study, but it is the phenomenon under scrutiny that swayed me to this methodological choice. Rule and John (2011, p.8) state that an exploratory case study "...often examines a phenomenon that has not been investigated before; [it can then] lay the basis for further studies as it attempts to explain what happens in a particular case or why it happens".

Like any other methodologies, a case study does have its fortes and flaws (Cohen, Manion & Morrison, 2007; Mills, Durepos & Wiebe, 2010; Murphy, 2014; Starman, 2013). They state that among other strengths of a case study lies the ability of a single researcher to conduct the study; the results of a case study can easily be understood by a layman because it reports on social reality issues. A case study plays a critical role in advancing knowledge in a particular field. Cohen, Manion, and Morrison (2011) as well as Crowe et al. (2011) further postulate that case study designs can answer 'how' and 'why' questions. Furthermore, it allows research to be based on a specific geographical area. The area in which this study is conducted is specifically rural. The choice of such an area is thoroughly discussed in the latter part of this chapter.

Based on the above strengths, this case study was able to provide findings of the interpretations of the data generated for this study. Regardless of its strengths, this study has its limitations as referred by McLeod (2019), Murphy (2014), Garger (2013), Yin (2009) and Griffin (2004). Firstly, they assert that case studies are time-consuming and have no ability of generalising the result to the wider population. They are of the view that the researcher's feelings may impact the study and subsequently produce biased findings. Lack of rigour is another limitation that is caused by the researcher's freedom and sloppiness which result in failure to follow procedure. However, the latter part of this chapter thoroughly addresses the abovementioned concerns in support of the methodology used in this study.

This research study was able to utilise the strengths of this approach as I successfully gathered data about the participants' experiences, understandings, and perspectives of the research problem. I managed to build up trust with the participants as I was supposed to work very closely with them. The use of their language made it easier for the participants to communicate freely with me which led me to gain rich and more detailed data for the study. I failed to overcome some of the disadvantages of using this approach like that of consuming a lot of time as it demanded individual attention in following the participant's behaviour. More days were needed in gathering data which led to high financial travelling costs.

# 5.2.2 Research Paradigm

This study is viewed through the interpretivism paradigm which is anti-positivist and naturalistic (Dean, 2018; Pham, 2018; Nel, 2018). As stated earlier in this chapter, I have employed interpretivism as a mental window through which I viewed my study (Wentura, 2019). In this study, a paradigm determines how I view both the phenomenon I am examining and the research methods that should be employed to study the particular phenomenon. The term paradigm has been understood differently by various scholars. According to Thomas (2013, p.53), a paradigm is noted as "an unchanging thought that depicts the nature of a phenomenon". MacNaughton et al. (2001) explain that a research paradigm comprises three elements: a belief about the nature of knowledge, a methodology and criteria for validity. Neuman (2000) and Creswell (2003) refer to the paradigm as: epistemology or ontology, or even research methodology. Abou-Assali (2014) reiterates the view of Neuman (2000) and Creswell (2003) stating ontology, epistemology and methodology as three dimensions of

research. Other researchers argue that there are two other dimensions, which are axiology and rhetoric (Creswell & Plano Clark, 2011; Tashakkori & Teddlie, 2003; Tashakkori & Teddlie, 2010). Some scholars, Mackenzie and Knipe (2006) as cited in Thanh and Thanh (2015, p.24) classify variable theoretical paradigms as "positivist (post-positivist), constructivist, interpretivist, transformative, emancipatory, critical, pragmatism and deconstructivist". In the postpositivist paradigm, cause and effect are determinants of the philosophy (Rehman & Alharthi, 2016; Howell, 2013; Creswell, 2003). Contrary to that, interpretivist researchers understand the phenomenon through the experience and involvement of human beings (Pulla & Carter, 2018; Chowdhury, 2014; Yanow & Schwartz-Shea, 2011). According to Babbie and Mouton (2006), there are three main research approaches:

- a) the qualitative approach, which is related to phenomenology or interpretivism,
- b) the quantitative approach, which is related to positivism, and
- c) the participatory research, which is related to the critical paradigm in metatheory.

According to Willis (2012), interpretivism is not a stand-alone paradigm but belongs to a group of paradigms. Hermeneutics is one of them. As cited in Aliyu, Bello, Kasim and Martin (2014), Griffin (2006) asserts that hermeneutics, phenomenology and empiricism are the main significant epistemologies in modern and existing research. The philosophical base of interpretive research is hermeneutics and phenomenology (Boland, 1985). Hermeneutics is a major branch of interpretive philosophy with Gadamer and Ricoeur arguably being its most well-known exponents (Bohorquez, 2010; Dimitrov, 2019). This major branch of interpretive philosophy emerged in the late nineteenth century (Kaboob, 2001).

Given the above discussion, interpretivism was adopted by this study to understand the physical well-being of four-year-old learners to get them ready for Grade R. The behaviour and actions of human beings were not predicted but understood greatly. Interpretivist positions are founded on the theoretical belief that reality is socially fabricated, fluid and lacks any signs of rigidity and stringency. Thus, what we know is always negotiated within cultures, social settings, and relationships with other people (Pelzang & Hutchinson, 2017; Cohen & Crabtree, 2006).

#### 5.2.3 Research Approach

The nature of this study required the use qualitative research method to elicit information from participants. To fulfil the objectives of the study and understand the trajectory emanating from the research problem, I used a qualitative approach. Although qualitative research is not an easy term to define (Ritchie et al., 2013), qualitative methods are best for describing, interpreting, contextualising, and gaining in-depth insight into specific concepts or phenomena (McCombes, 2019). This view concurs with that of Denzin and Lincoln (1994, p.2) who argue that qualitative research is "multi-method in focus, involving an interpretive, naturalistic approach to its subject matter". Denzin and Lincoln (2005); Daher et al. (2017) reiterate the above by stating that qualitative studies examine the phenomena from a person's perspective, considering context. This means that qualitative researchers study things in their "natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings" people bring to them (Aspers & Corte, 2019; Denzin & Lincoln, 2005, p.3).

While other researchers have opted to use the mixed method which Creswell (2012, p.535) views as "an advanced procedure", I decided to utilise the qualitative method because of its "naturalistic, true-to-life properties" (de Vos et al., 2013, p.439). McLeod (2017) and Austin (2014) posit that qualitative research seeks to understand human behaviour from the participants' perspective where data is collected through interviews and observations. It is analysed by themes from descriptions of participants. This was deemed to be the most suitable approach to answering the research questions because this study was exploring human behaviour which lacks rigidity, and stringency and is fluid. Blanche, Durrheim & Painter (2012) point out that qualitative method researchers want to make sense of feelings, experiences, social situations, or phenomena "as they occur in the real world", and therefore want to study them in their natural settings (Aspers & Corte, 2019; Denzin & Lincoln, 2005, p.3). In this regard, it was easy to confirm the accuracy of the findings since the study unveiled the feelings and experiences of participants who are ECD practitioners.

Like any other methodologies, the qualitative approach has several advantages and limitations. When examining the advantages of the qualitative approach, Berg and Howard (2012), Maxwell (2012), De Vaus (2014), Leedy and Ormrod (2014) assert that the qualitative approach is useful in problem-solving because data that has been recorded using video, audio or field notes can easily be retrieved. It produces facts and vivid information that can be supported by words and photographs and has a liberated nature and innovation that is revealed by its ability to allow "the researcher to construct and reconstruct theories where necessary" (Daniel, 2016, p.92; Sifle & Melling, 2012). Despite all the advantages, the qualitative approach does have glaring limitations. Both advantages and limitations of this study are discussed later in this chapter.

Qualitative research is regarded as a time-consuming process (Almeida, Faria, & Queirós, 2017; Shakouri, 2014) with no result verification (Junior, Abib, & Hoppen, 2019; Noble & Smith, 2015), labour intensive (Crossman, 2020; Mohajan, 2018) and poses difficulty to investigating causality (Boddy, 2019; Plumper, Troeger, & Neumayer, 2019). It must be noted that "all criticisms, arguments and counter arguments made by authors about the research approaches border only on the methods of data collection, analysis and summary of the results" (Daniel, 2016, p.92; Creswell, 2009; Johnson & Christensen, 2012). It is, therefore, in the operations (collecting, analysing and summarising of results) of research approaches where condemnations are found. However, in this research study, methods of data generation, analysis and presentation of findings were appropriate as the study was examining the physical activities of four-year-old learners which cannot be predetermined and prearranged.

# 5.2.4 Data Generation Methods

This study employed a qualitative approach to address research questions and solve the research problem. Qualitative research is empirical where data are not in the form of numbers (Punch, 1998, p.4; Wong, 2014; Antwi & Kasim, 2015). In data generation, I referred to the literature relevant to the research topic and to qualitative observations throughout data collection and analysis. This assisted in shaping subsequent data collection and analysis according to new perspectives that arouse from reference to previous research (Braun & Clark, 2006).

Cavana, Delahaye, and Sekaran (2001) and Creswell (2008) suggest that the methods of data generation in qualitative study are interviews, observation, questionnaires and focus groups. Table 5.1 below gives a thumbnail presentation of data generation methods that were used in addressing each study' research question.

**TABLE 5.1:** Research question and data generation method used

 **SOURCE:** Author

RESEARCH QUESTIONS	DATA GENERATION METHOD
1. What is the nature of practices ECD	Participant observations
practitioners employ to enhance the physical	Semi-structures interviews
well-being of four-year-old learners'	
readiness for Grade R?	
2. How does the ECD Centre promote the	Participant observations
physical well-being of four-year-old learners	Semi-structured interviews
for their readiness for Grade R?	
3. How are ECD practitioners pedagogically	Semi-structured interviews
prepared to plan for the physical activities for	
four-year-old learners' readiness for Grade	
R?	
4. Why do ECD practitioners prepare four-	Participant observations
year-old learners' physical well-being and	Semi-structured interviews
readiness for Grade R in the manner they do?	

For the purpose of generating credible and trustworthy data, semi-structured interviews as well as observations were employed. This section elaborates on what interviews are and gives stepby-step guideline on how to conduct qualitative interviews. Seale et al. (2004) define an interview as a social encounter where speakers collaborate in producing retrospective and prospective accounts or versions of their past or future actions, experiences, feelings and thoughts. There are three types of interviews: structured, semi-structured and unstructured (Cropley, 2019, Mueller & Segal, 2015; Wethington & McDarby, 2015). Frances, Coughlan & Cronin (2009) refer to them as standardised, semi-standardised and unstandardised respectively. However, there are scholars like Jong and Jung (2015) who only mention two types of interviews, structured and semi-structured while Stuckey (2013) refers to unstructured interviews as narrative interviews.

According to Meyers and Newman (2007, p.2) a researcher should utilise the following guidelines to direct a qualitative interview:

- a. Researcher situation for validity reasons, the researcher should set his/her role and position before the interview.
- b. Minimise social dissonance the researcher should be aware of social and cultural barriers, which may include, for example, the corporate position of participants or dress code.
- c. Ensure good representation people differ and, therefore, it is wise to interview a variety of people.
- d. Everyone interprets participants also interpret their world and therefore there is more than one interpretation of the same interview.
- e. Mirroring focus on the participant's world and gather more information than words only through the use of communication skills such as listening, building on participants' stories, creative but sensitive prompting, encouraging and directing of conversation.
- f. Flexibility semi-structured and unstructured interviews require the researcher to explore, listen carefully, improvise and be open to acknowledging differences in participants such as shyness or fatigue.
- g. Confidentiality get permission from participants, treat everybody with respect, keep all information in a safe and secure place, check facts with participants again if necessary and keep commitments to participants and organisations (Myers et al., 2007, p.16).

# 5.2.4.1 Semi-structured, in-depth, face-to-face interviews

The study used semi-structured interviews to explore intensively and extensively issues on the physical well-being of four-year-old children and their readiness for Grade R as well pedagogical preparedness of ECD practitioners to plan for physical activities. I planned a set of predetermined questions that were used to engage the participants as a guide during the interview. The participants were allowed time to read through the set of questions before the interview began. Those set of questions were used more of a guide, as the researcher was continuously using frequent probes based on the participant's responses. I had pre-planned open-ended questions on hand during the interview.

The use of semi-structured interviews enabled me to engage in face-to-face interaction with the participants. (Cohen, Manion, & Morrison, 2011). Through interviewing using semi-structured interviews, I hoped to obtain in-depth information which could not be provided by structured

interviews (Rule & John (2011). In semi-structured interviews, the dialogue can meander around the topics on the agenda - rather than adhering slavishly to verbatim questions as in a standardised survey - and may delve into totally unforeseen issues (Adams 2015, p.493). Kumar (2014) defines interviewing as a person-to-person interaction, either face-to-face or otherwise, between two or more individuals with a specific purpose in mind. Interviewing is defined by Creswell (2012) as a process in qualitative research when researchers ask one or more participants general, open-ended questions and record their answers. In this study, interviewing is defined as a mode of eliciting responses from participants face-to-face to answer the research questions of the study. Interviewing is further regarded as a deliberate qualitative process aimed at achieving the objectives of the study. Dörnyei (2007) as cited in Alshenqeeti (2014, p.41) states that a "good" interview has two key features: "(a) it flows naturally, and (b) it is rich in detail". To satisfy this requirement, I used an interview technique that is suggested by Owen (2014) which includes three types of questions: main questions, follow-up questions, and probes.

Appointments for interviews were made with ECD practitioners. ECD practitioners preferred to be interviewed in the ECD Centre. During interviews, audio taping of the interview process took place, and I was also taking careful notes as a backup. Cohen et al. (2011, p.236) state that a schedule should be prepared which is "...sufficiently open-ended to enable the contents to be re-ordered, digressions and expansions to be made, new avenues to be included, and further probing to be undertaken". Creswell (2012) defines the interview schedule as a form designed by the researcher that contains instructions to be asked, and spaces to take notes of responses. DeJonckheere and Vaughn (2019) refer to the interview schedule as an interview guide. It is a set of prepared questions which have a standardised format designed by the interviews chedule used to gather qualitative data from ECD practitioners comprised information about the research topic, information on the purpose of the study, the name of the ECD centre, position in the ECD centre, qualifications, date, the time and venue of the interview, and the number of years as ECD practitioners. The interview schedule comprised open-ended questions which elicited information from the interviewees.

Conducted face-to-face with one ECD practitioner at a time, the semi-structured interview (SSI) allowed for use of a combination of closed and open-ended questions, often supplemented by follow-up why or how questions (Stuckey, 2013). There was no prescribed length for the

interviews as they were semi-structured. It depended on the extent each ECD practitioner responded to each question. The first question served as an icebreaker. Core questions, from Question 2 to Question 5, addressed major research questions as a way of eliciting information from interviewees. During the interviews, I probed some interviewees to elicit further information. I jotted down notes on the interview schedule and kept eye contact with the interviewees throughout the interview process (Edwards & Holland, 2013; Jong & Jung, 2015).

Member checking was done. Member checking is a "way of finding out whether the data analysis is congruent with the participants' experiences" (Curtin & Fossey, 2007, p. 92). I gave all three ECD practitioners copies of the narratives they gave during their interview sessions. I asked them to read and confirm the correctness of the narratives. Where there was a need, I gave them the freedom to edit the narratives. I made this an individualistic exercise so that participants were not pressured to do what their peers did.

The participants were given consent letters that assured them of the confidentiality of their responses. They also had the opportunity to ask questions at the end of the interviews. Finally, I discussed how I intended to disseminate information. I indicated to the interviewees that I had planned to circulate the findings of this study by publishing this work in a ubiquitous journal article.

# 5.2.4.2 Observation

According to Seabi (2012, p.91), "observation" is defined as a technique of generating data where the researcher notices and identifies material through his or her senses. Lichtman (2013, p.165) states that "observing humans in their natural setting assists our understanding of the complexity of human behaviour and interrelationships among groups" – this is particularly useful for empirical studies since observation assists the researcher with capturing authentic data in the participants' natural setting. During observation, a researcher has to take a certain stance that suits the objectives of the study and answers research questions (Kawulich, 2005, 2012). Gold (1958) mentions four stances that a researcher can take while Baker (2006) outlines seven stances.

In this study, I chose to take the participant-observer stance. Borjesson (2014) describes participant observation as "the most scientific method" because it is the only one that gets close to people and allows researchers to observe what people do while other empirical methods are
limited to reporting what people say about what they do". I participated in group activities as desired, yet my main role as a researcher was to collect data, and the group under scrutiny was aware of my observation activities. Participant observation aims to assist the researcher in holistically understanding the phenomenon (Iacono, Brown, & Holtham, 2009). Both categories of participants were observed. There were three formal classroom observations with each ECD practitioner. I conducted three observations per practitioner with a follow-up observation debrief after each observed lesson. During the observation, both descriptive and reflective notes were gathered to gain a deeper understanding of the teacher's practice and perceptions. Within one to two days of each lesson, I conducted a 20-30-minute debriefing of each observation. These meetings were utilised to assist in accessing reflective insight from the teachers on their perspectives on classroom activities that enhance the physical well-being of learners.

I observed learners in two settings: in the classroom and the playground. The notion behind these observations was to capture the physical well-being of four-year-old learners in relation to their readiness for Grade R. Rich field notes were compiled during observations because "The qualitative approach demands that the world is viewed with the assumption that nothing is trivial, that everything has potential of being a clue that might unlock a more comprehensive understanding of what is being studied" (Slavin 2007, p.121). During observation, every piece of information is important to produce rich findings (Moser & Korstjens, 2018).

According to Cohen et al. (2005), the observations of a research study are detailed in field notes. Because these notes are based on observations, field notes document what is apparent or highlighted during the observations of participants. Cohen et al. (2005) explain that field notes are written descriptions that contain a certain standard of explanation, such as written descriptions and reports; these are based on the event and the behaviour of the participants. Furthermore, Cohen et al. (2005) state that field notes can either be detailed at the research site or outside of it. The reason this is done is that it permits the researcher to continuously note down the detail of what transpires during the observation. Therefore, it is for this reason that Kowal and O'Connell (2014) encourage that the interviews, observations and all other forms of qualitative data generation should be documented and transcribed.

The observation schedule included the observation of the physical well-being of four-year-old children and included observation of both fine and gross motor skills. Table 5.2 below presents which fine motor and gross motor skills' activities were observed:

## **TABLE 5.2:** A table of fine and gross motor skills observed

## **SOURCE:** Author

FINE MOTOR OBSERVATION	GROSS MOTOR OBSERVATION
Build a tower of 9 -10 blocks	Sing classic songs, and add some action
	including:
	• I'm a Little Teapot
	• If You're Happy and you Know it
	• Here we Go 'Round the Mulberry
	Bush
Use playdough to make balls, snakes, etc.	Play indoor hopscotch
Build things with large linking blocks	• Playground climbing and swinging.
Draw a circle by himself/herself	• Large balls: Begin catching with a
	large ball/balloon and only after the
	skill is mastered, move to a smaller-
	sized ball.
Copy a cross (+)	Running
Imitate a practitioner to draw a square	Jumping
Cut across a piece of paper	• Balancing: Have children walk on a
	low beam or plank at the playground
	or a homemade balance beam.
Start to cut along a straight line	
Manage buttons	
Washing of hands	
Putting shoes on and off	

# 5.2.5 Sampling

Child involvement in scientific research requires parent/guardian approval, which is termed parental consent, and child's approval, which is termed assent (Hoberman, et al., 2013). In this study, consent was received from parents and no assent was received from four-year-old learners. Four-year-old learners are too young to understand the objective of this research and the assent that they could give would not be informed. Nijhawan et al. (2013) supports my

stance who state that if the child is above 7 years of age, then "child assent" is also mandatory. In this study, were between the ages of four and five.

In a study that was conducted in the Middle East in a developing country, participating students (age 13-15) were asked: "If you are requested to participate in a research project, do you think that approval should be obtained from you and/or your parents?" All students (males and females) agreed that it is necessary to take the approval from the parents, except one male student who thought it is not necessary to take parents' approval in research participation except for research that requires blood withdrawal test (Alsheyab et al., 2019).

The key ethical question in this study was the involvement of underage children who could not give consent for whatever action that was going to involve them during the research process. In this study, four-year-old learners were observed to examine their physical well-being. I understood that four-year-old learners could not give consent because of their age. I prepared letters of informed consent (Appendices C and D) for parents of children who were going to be observed in the study. The issued letter described the phenomenon, and research context, stated the purpose of the study, assured confidentiality and provided them a choice to allow or not to allow their children to take part in this survey. Some parents signed the informed consent letter permitting their children to be participants in the study. Other parents did not give consent for various reasons. They were living away from their children or deceased or just not interested in the well-being of their children. In such cases, the principle gives rise to an obligation to gain proxy informed consent (Waligora, Różyńska & Piasecki, 2016). Informed consent was received from adult family members who, in the absence of parents, assumed a parental role.

### 5.2.5.1 Research Sample

Target participants are the total set of components for which the survey data are to be used to make inferences, and the total group of individuals from which the sample might be drawn (McLeod, 2019). According to Patton (2002), one of the advantages of selecting appropriate participants is that the selection process allows suitable participants to provide rich information. Through the participants sharing their experiences, the gathered information enlightens the research topic because of its authenticity (Creswell, 2012; McMillian & Schumacher, 2006). Creswell (2009, p.138) affirms that the selection of the participants and their sites is determined by four factors, which are a) the location in which the study will occur, b) the groups that will be interviewed and observed, c) the occasions when the study will be conducted, and d) the

process followed during these occasions. In Chapter 1 of this study, I stated one ECD centre was going to be selected as the research site for the study. The ECD practitioners as well as four-year-old children formed the target sample of this study. The nature of the research questions and objectives of the study contributed to the choice of the target sample.

### 5.2.5.2 Sampling Method

The study utilised purposive sampling to generate qualitative data (Stark, Brown, & Trinidad, 2007). Three ECD practitioners who fit the criteria and attributes of the study were selected. Including a larger sample would lead to wastage of resources, risk that the true treatment effect may be missed due to heterogeneity of large population and would be time-consuming (Stanley, 2007). The first inclusion criterion was that they had to have been teaching in ECD for at least three years. The second inclusion was that eligible participants must have been currently teaching four-year-old learners. Creswell (2012) argues that in purposive sampling, researchers intentionally selected individuals and sites to learn or understand the central phenomenon. Four-year-old learners, were regarded as "information rich" and thus provided valuable information to address the research questions and objectives of the study. As mentioned in 5.2.5, I prepared letters of informed consent (Appendices C and D) for parents of children who were going to be observed in the study. No photographs of learners were used in this study.

#### 5.2.5.3 Sample Size

Streiner (2003) recommends that researchers keep the following three criteria in mind when considering the size of the sampling frame: the level of precision, the level of confidence or risk the study is willing to take, and the degree of variability in the attributes being measured. There are two fundamental reasons for extracting an acceptable sample size (Kalton 1999, p.90): a minimum number of cases is required to analyse sub-group relationships (factor analysis, etc.) adequately; and to draw inferential conclusions, the sample must, as far as possible, represent the population under scrutiny.

I selected the three ECD practitioners. They are all from Mandlankala, a rural area near Empangeni under UMhlathuze Municipality. They do not have formal training for ECEC. Two of the three had been working in the ECD Centre for quite some time. One was fairly new in the job. The ECD practitioners who were selected indicated other befitting ECD practitioners to take part in the study. They stated that one of the three selected practitioners was new in the

profession and felt she could not make a substantial contribution to the study. These members of the population aimed at identifying a further set of relevant individuals. That would cause the sample to grow in size like a rolling snowball (Welman & Kruger, 1999). This would create snowball sampling (Martínez-Mesa et al., 2016). I assured the three initially selected participants that they meet all the requirements for the study. The three selected practitioners were teaching four-year-old learners. The four-year-old learners were also participants in the study. Their selection was also purposive because they were preparing to go to Grade R the following year.

## 5.2.6 Data Analysis

Table 5.3 below presents phases of data analysis as well as the description of analysis process.

# **TABLE 5.3:** Data Analysis Table

Source: Adapted from Braun and Clarke (2006)

PHASES	DESCRIPTION OF ANALYSIS PROCESS
1 Eamiliarising myself with data	i) Narrative preparation i.e. transcribing data
1. I anniarising mysen with data.	ii) Do reading the date and noting down initial
	ii) Re-reading the data and noting down initial
	ideas.
2. Generating initial codes.	i) Coding interesting features of the data in a
	systematic fashion across the entire data set.
	ii) Collating data relevant to each code.
3. Searching for themes.	i) Collating codes into potential themes.
	ii) Gathering all data relevant to each potential
	theme.
4. Reviewing themes	i) Checking if themes work in relation to the
	coded extracts.
	ii) Checking if themes work in relation to the
	entire data set.
	iii) Reviewing data to search for additional themes.
	iv) Generating a thematic map for analysis.
5. Defining and naming themes.	i) Ongoing analysis to refine the specifics of each
	theme and the overall story the analysis tells.

	ii) Generating clear definitions and names for each
	theme.
6. Producing the report.	i) Selecting vivid, compelling extract examples.
	ii) Final analysis of selected extracts.
	iii) Relating the analysis to the research question,
	objectives and reviewed literature.

Data obtained from this study was analysed through the thematic content analysis approach (Grbich, 2010), which involves an interpretative process in which data is systematically searched for patterns to provide the illuminating description of the phenomenon (Chenail, 2012; Smith & Firth, 2011). Thematic content analysis result in the development of meaningful themes and provides rich insights into complex phenomena (Gale et al., 2013).

The point of entry of data analysis was to become familiar with information from interviews and observations (Grbich, 2010). I did this by immersing myself in the research data by reading it repeatedly (Chenail, 2012). This was done to obtain a sense of the descriptive information (Creswell, 2003; 2006; 2009) supplied by the study participants on the physical well-being of four-year-old learners in relation to their readiness for Grade R and pedagogical preparedness of ECD practitioners to plan for physical activities. From this immersed reading, I developed codes and categories (Elliot, 2018; Linneberg & Korsgaard, 2019) by considering each line, phrase and paragraph of the transcript (Smith & Firth, 2011; Harding & Whitehead, 2013). Coding is a process of defining and categorising data (Charmaz, 2006). Codes or tags are labels used to group data according to themes or patterns. The research objectives motivate the formulation of themes or patterns (Rogers et al., 2011, p.286). Rule and John (2011, p. 77) state that "Good qualitative research would allow some codes to be brought to the data (deductive analysis) but ensure that ample room is created for the data to 'speak' and 'name' additional codes (inductive analysis)".

Coding assisted to reveal relationships between categories being identified (Charmaz, 2006). I also used the constant comparative method (Turner, Kim, & Anderson, 2013) to verify the emerging categories and concepts. Data coding included generating categories of the dataset that have recurring patterns (Nowell, Norris, White, & Moules, 2017; Strauss & Corbin, 1998) and I used these to manage data as research themes (Vaismoradi, Jones, Turunen, & Snelgrove, 2016; Turner, Kim, & Anderson, 2013). The coding process entailed reading through the data

and list of response codes, referring back to the original interview transcriptions, and reassigning response codes to different themes that best represented them. After response codes were identified, I sorted them into themes (Braun & Clark, 2006). I subsequently used the emerged themes to write the study report and did this by summarising and synthesising the themes derived from raw data (Braun & Clark, 2012; Creswell, 2003), comparing the results to the study's research questions and existing literature on the subject (Creswell, 2003; 2012). As explained earlier in this section, data analysis was done by "identifying, analysing, organising, describing, and reporting themes found within a data set (Braun & Clarke, 2006; Nowell, Norris, White & Moules, 2017, p.2). Here are the themes which emerged from raw data. However, they will be properly presented in the next chapter. In Chapter 5, the emerging themes that are presented below will be accompanied by their sub-themes:

- a. Developmental Delay in Physical Well-being for Grade R Readiness.
- b. Causes of Developmental Delay in Physical Well-being for Grade R Readiness.
- c. The impact on the learner
- d. Engagement of ECD Practitioners
- e. Concerns of ECD practitioners

## 5.2.7 Rigour and Quality in Qualitative Research

To maintain trustworthiness in this study, I conducted data analysis in a detailed, unswerving, and exhaustive manner through recording, arranging and going through it vigorously until themes emerged from the data. Kumar (2014) cites Cuba and Lincoln (1994), who emphasise four indicators closely related to validity and reliability in qualitative research: credibility, transferability, dependability and confirmability.

## 5.2.7.1 Credibility

Credibility is similar to validity in quantitative research (Leung, 2015; Noble & Smith, 2015). Abdalla, Oliveira, Azevedo, & Gonzalez (2018) confirm this by stating that positivist researchers employ this criterion as an assurance that what they are measuring is exactly what is supposed to be measured. To ensure credibility, I did member checks with the participants. This is about taking the data back to the participants so that they confirm, validate and approve the findings of the study (Korstjens & Moser, 2018). I also made use of triangulation to confirm the credibility of the findings of the research study. This is in unison with Cho and Trent (2006)

who posit that to gauge credibility, the interpretations of the researcher should resemble the perspectives of the participants.

## 5.2.7.2 Transferability

Transferability pertains to the level to which the findings of study research can be transferred or reassigned to other environments or surroundings (Trochim & Donnelly, 2007; Kumar, 2014). For transferability to be possible, it is the responsibility of the researcher to give more light and proper description in terms of sampling and the location of the study (Polit & Beck, 2010; Guba & Lincoln, 1989). Merriam (2007) stresses "typicality" where the nature of the setting (time, place and participants) allows transferability to be witnessed (Trochim, 2020). In Chapter 1, I described the research context in detail. This study was conducted in KwaZulu-Natal at an ECD centre in Mandlankala, an area near Empangeni, north of Zululand. Mandlankala is a rural area. Moreover, I used thick description to show that the research study's findings can be applied to other contexts, circumstances, and situations. Participants of the study are four-year-old learners who are gearing up for Grade R and their ECD practitioners. Transferability is external validity (Abdalla et al., 2018). However, in this study, the establishment of firmness of transferability was tricky. This is supported by Lincoln & Guba (1985, p.316) who asserted that "it is, in summary, not the naturalist's task to provide an index of transferability, it is his or her responsibility to provide the data base that makes transferability judgements possible on the part of potential appliers".

## 5.2.7.3 Dependability

Dependability is similar to reliability in quantitative research (Kumar, 2014). The focal point of reliability is to assess whether the research instrument can yield the same results if used twice or if the same research would be conducted by another person (Lincoln & Guba, 1985; Polit & Beck, 2012, Trochim, 2020). For a study to be dependable, it is crucial that the researcher thoroughly explains and elaborates on ethical issues, research participants, location of study, research design, data collection and analysis. Thomas and Magilvy (2011) state that dependability can be achieved if another researcher follows the audit trail used by the initial researcher. Dependability also requires an objective researcher who refrains from jumping to conclusions. I used an inquiry audit in order to establish dependability, which required an outside person to review and examine the research process and the data analysis to ensure that the findings were consistent and could be repeated. The process of bracketing one's biases about

participants is called 'epoche.' As a result, I did not pass any prejudgement about the phenomenon under scrutiny.

## 5.2.7.4 Confirmability

The last indicator for judging the trustworthiness and authenticity of the research instrument in qualitative research is 'confirmability.' Kumar (2014) cites Trochim and Donnelly (2007), who define confirmability as the level to which the outcomes can be confirmed or validated by others. In this sense, confirmability tends to be similar to reliability in quantitative research. To ensure the confirmability of the results, I identically followed the process for the results to be compared. This means that what happened during the first interview was thereafter used throughout the process of collecting qualitative data. This means that the interviewer, being a research tool herself, maintained the same nature of interaction with interviewees in all interviews, even though interview times were different. Miles, Huberman, and Saldaña (2014) consider that a key measure for confirmability is the researcher's justification of his/her inclinations or convictions. This means that the researcher must state why he/she chose certain research methods to conduct a study and convincingly declare reasons for favouring a particular approach over another (Abdalla, Oliveira, Azevedo, & Gonzalez, 2018). In this study, I highlighted every step of data analysis that was made in order to provide a rationale for the decisions made. This helped establish that the findings of the research study accurately portray participants' responses.

## **5.3 ETHICAL ISSUES**

Before conducting research, I needed to obtain an ethics approval (Morgans & Allen, 2005) although "research ethics approval processes can be bureaucratic, time-consuming and frustrating" (Newson & Lipworth, 2015, p.170). Ethics is defined as the moral philosophy or a set of moral principles underpinning a project (Aubrey et al., 2000, p.156; Vanclay, Baines & Taylor, 2013). The study was conducted ethically. Before conducting the study, I sought permission from the University of KwaZulu-Natal Research Ethics Committee, the KwaZulu-Natal Department of Social Development, and the participants. Although Van der Heide, Rufas, and Supper state that "Dissertation defences are ambiguous affairs" (2016, p.1) and some institutions conduct them at the end of a long doctoral studies journey, one of the requirements for the attainment of the ethical clearance certificate was that I had to submit and orally defend a research proposal in which all the details of the study were outlined. Having fulfilled all the requirements required by the University of KwaZulu-Natal, School of Education, I was

approved and issued with an ethical clearance certificate. This meant that permission was granted to conduct the study.

When permission was granted, it was then feasible for me to gain access to the ECD Centre and to reach the participants. For permission of gathering qualitative data, telephonic appointments were made with the principal of the ECD Centre. I explained the purpose of the study to selected ECD practitioners who were going to be interviewed. Participants were requested to sign the informed consent form prior to interviews.

Several ethical requirements were considered during the data generation process. Ochieng (2012, p.16) states that "respect for persons requires that research participants be given the opportunity to make choices about what should be done to them". During interviews, I avoided deceptive practices toward interviewees and respected the views of all the participants who took part in the study. I realised the need to know and understand the 'way of life,' culture, and historical background of the community of Mandlankala area to gain access to conduct the qualitative study. Respecting the cultural value systems of the participants helped me to obtain sensitive information for the study. Another ethical responsibility was to preserve the anonymity of the participants in the final write-up and field notes to prevent their identification, should the field notes be subpoenaed for inspection. Individual identities were described in ways that community members would not be able to identify the participants. The identities of participants were perfectly masked. No real names were used but pseudonyms were allocated to ensure confidentiality. Participants were also free to decline to answer certain questions during interviews. I used a dual password on the computer to safely keep data that had been gathered from this study.

There were no incentives or monetary compensation provided to participants as the study was meant for academic purposes.

## **5.4 MY ROLE AS A RESEARCHER**

The role of the researcher in qualitative research cannot be underestimated. The qualitative researcher needs to describe the significant aspects of self, including any biases and assumptions, expectations and experiences to qualify his or her ability to conduct the research (Simon, 2020; Greenbank, 2003).

Several tools can be used to collect data in qualitative research. One of these tools is the researcher himself /herself who is at the forefront of qualitative data collection (Bahrami et al., 2016; Wa-Mbaleka, 2020; Xu & Storr, 2012). In this study, I found myself as a human instrument (Denzin & Lincoln, 2003) who played a primary role in the process of data generation. Data are reconciled through this human instrument rather than other apparatuses (Wagner et al., 2012; Simon, 2020). As a human instrument in this study, I avoided any biases that could have adversely affected the research findings. This human instrument avoided the following three biases: confirmation bias, question-order bias, and leading-questions and wording bias (Popov, Parker, & Seath (2018); Sarniak, 2015; Shah, 2019).

*Confirmation bias.* This most common and highly recognised bias occurs when a researcher interprets the data to support his or her hypothesis. Researchers may also omit data that does not favour their hypothesis. To avoid this, I used member checking with the research participants before the commencement of data analysis process.

*Question-order bias.* Some questions may influence the responses to subsequent questions. Participants may compare and judge subsequent questions based on their response to the first question resulting in a biased and inaccurate answer. In this study, I avoided question-order bias by asking general questions before specific ones during semi-structured interviews.

*Leading questions and wording bias.* Questions that lead or prompt the participants in the direction of probable outcomes may result in biased answers. In this study, while leading questions, I avoided elaborating on a participant's answer and putting words in their mouth.

The bone of contention here has been the privileged position of the researcher as opposed to a somewhat inferior spot of the participants (Råheim et al., 2016). This inequality is perceived as a potential ethical threat to the research study. However, Karnieli-Miller, Strier & Pessach (2009, p.279) assert that it has been an ideology of qualitative research to possess "... a common epistemological ground: the researcher determination to minimise the distance and separateness of researcher-participant relationships". I created a rapport between the participants and myself to make them more at ease. Effective ways of creating rapport are by subtly matching both verbal and non-verbal communication pattern especially voice patterns, body language and eye contact by developing the genuine interest in the participant (Youell & Youell, 2011).

As a researcher who believes in an unbiased, unprejudiced study, it was important to state whether I took an emic or an etic stance when conducting the study. Creswell (2007, p.242) defines an emic perspective as "...when the researcher reports the views of the informants..." as opposed to an etic perspective where "...the researcher reports his or her own personal views..." The research adopted an emic perspective to be able to understand and interpret the experiences and behaviour of the study participants. This allowed me to "...capture participants' indigenous meanings of real-world events" (Yin, 2010. p.11). This takes us to the question of "reflexivity" in qualitative research (Palaganas et al., 2017).

Gouldner (1971, p.16) as cited in Dowling (2006) posits that reflexivity pertains to "analytic attention to the researcher's role in qualitative research". I understood the concept of reflexivity as displayed in my role in this qualitative research study. I ensured methodological consistency, worked inductively, remained an alert investigator, mastered sampling techniques, and attended to ethical issues that could have harmed the study (Palaganas et al., 2017; Morse, Barrett & Olsen, 2002).

## 5.5 LIMITATIONS OF THE STUDY

No study is immune to limitations because "all proposed research projects have limitations; none is perfectly designed" (Marshall & Rossman, 2006, p.42). Limitations are usually out of the researcher's control and may affect the results and conclusion of the study (Simon & Goes, 2013; Theofanidis & Fountouki, 2019). With this notion in mind, I conducted this study hoping to determine the underlying challenges and limitations that I might come across. The following were limitations that were anticipated:

## 5.5.1 Data Generation

Limitations were provoked by a lack of sufficient participation by the sampled participants during interviews. They perceived the exercise as an assessment of their teaching strategies. I put it upon myself to find out what could have been the course for this. The participants confessed that they had never been involved in any research study as participants. Moreover, they had never heard of any research being conducted in the community and nearby schools. To a certain extent, this situation also affected the validity of the data to be collected as the participants were in some instances reluctant to disclose details about the context they were in.

They were afraid that if they disclosed substantial information about their experiences, the principal might accuse them of disloyalty.

However, despite all these odds, I enhanced the data collected by acknowledging bias and the possible circumstances that influenced the data in one way or the other. Moreover, to address the limitations as far as data collection was concerned, triangulation was applied by using a different tool for data collection (Maxwell, 2012), which is observation. This was in line with the suggestion by Marshall and Rossman (2006, p. 202) who mutually advise that "…bringing more than one source of data to bear on a single point is vital". The use of triangulation to validate data is reiterated by Voets, Keast, and Koliba (2019); Salkind (2010); Macey and Fink (2020). Patton (2014) postulates that this paints a more dependable and honest picture of the phenomenon.

## 5.5.2 Setting for Interviews

Although prior arrangements were made with the ECD Centre, the setting was found to be inappropriate, having interferences. There were a lot of interruptions during interviews since interviews were conducted at the participants' workplace during work hours. This happened despite all efforts taken to reduce interruptions such as knocks on the door by participants' colleagues. There was also a lot of noise outside the interview room from learners and other practitioners.

## 5.5.3 Data Analysis

The nature of the qualitative study relied on the researcher's judgements of data collection and analysis. I was the main data collection instrument for interviews and observations. However, the possibility of bias was minimised by the assistance I received from an expert co-coder because "it is recommended that the analysis be performed by more than one person to increase the comprehensivity and provide sound interpretation of the data" (Burla et al., 2008; Elo et al., 2014 p.5; Schreier, 2012). The use of strategies such as trustworthiness of the study also minimised the possibility of bias.

## **5.6 CHAPTER SUMMARY**

This chapter focused on the research methodology and design used in the study. Data were collected through semi-structured interviews of three ECD practitioners, three formal classroom observations with each practitioner, and teacher observation debriefs. The use of multiple data sources provided a wide and diverse pool of information from which to draw (Yin, 2014). I developed an understanding of the whole phenomenon through the convergence of each piece of data; this strengthened the study. The research methods and design in the study have been tested and utilised by other researchers and are believed to be relevant in yielding the best results for studies of this nature. The chapter also discussed the sampling and procedures as well as methods of data analysis. The next chapter provides the presentation, interpretation and analysis of data emanating from this study.

## CHAPTER SIX

## DATA PRESENTATION, ANALYSIS AND FINDINGS

#### **6.1 INTRODUCTION**

The first four chapters of this study provided an introduction, a review of the literature on the physical well-being of four-year-old learners, a theoretical framework for the study and methodology and the research design. The previous chapter included research design, sampling methods and a detailed description of the data collection methods, instruments, and strategies of data analysis. The purpose of this study is to examine the physical well-being of four-year-old learners in relation to their readiness for Grade R. The aim of this chapter is to present research findings and analysis. The analysis was informed by the data that emanated from the semi-structured interviews, participant observations and literature review. All interviews were transcribed. Data were analysed through thematic content analysis (Grbich, 2010), which involves an interpretative process in which data is systematically searched for patterns to provide an illuminating description of the phenomenon (Chenail, 2012; Smith & Firth, 2011).

Practitioners are referred to as P1, P2 and P3 and the narratives are italicised. The qualitative data is represented by emerging themes and sub-themes as they relate to the research questions and are presented on the next page. Table 6.1 below presents the research questions, the emerging themes and their sub-themes

# **TABLE 6.1:** Research Questions with Emerging Themes and sub-themes

# **SOURCE:** Author

RESEARCH QUESTIONS	EMERGING THEME AND SUB-
	THEMES
i. What is the nature of practices ECD	1. Developmental Delay in Physical Well-
practitioners employ to enhance the physical	being for Grade R Readiness.
well-being of four-year-old learners'	1.1 Self-care
readiness for Grade R?	a) Toilet Training
	b) Washing of Hands
	c) Putting Shoes on and off
	1.2 Following Simple Directions and
	Instructions
	1.3 Underdevelopment of Motor Skills
ii. How does the ECD Centre promote the	2. Causes of Developmental Delay in
physical well-being of four-year-old learners	Physical Well-being for Grade R
for their readiness for Grade R?	Readiness.
	2.1 Insufficient Parental Involvement
	a) Mothers as Dominant Parents
	b) Absent Fathers
	c) Grandparents assuming a Parental
	Role
	d) Child-Headed Homes
	2.2 The Interactional Nature of Systemic
	Poverty and Physical Readiness
iii. How are ECD practitioners pedagogically	3. The impact on the learner
prepared to plan for the physical activities for	3.1 Low self-esteem
four-year-old learners' readiness for Grade R?	3.2 Learners' Non-Compliance

iv. Why do ECD practitioners prepare four-	4. Engagement of ECD Practitioners
year-old learners' physical well-being and	4.1 Expectations of Practitioners
readiness for Grade R in the manner they do?	a) Practitioner Development
	b) ECD Centre Upgrades
	c) Education Equipment Provision
	d) Family Outreach Programmes
	e) Sharing of Knowledge
	5. Concerns of ECD practitioners
	5.1 Restlessness of Learners
	5.2 Lack of Resources
	a) Water Crisis
	b) Outdoor Play
	5.3 Poor Management of ECD Programme
	Class Size

# 6.2 DATA PRESENTATION AND ANALYSIS ACCORDING TO THEMES AND SUB-THEMES

# 6.2.1 THEME 1: DEVELOPMENTAL DELAY IN PHYSICAL WELL-BEING FOR GRADE R READINESS

This study deemed it essential to understand the kind of activities ECD practitioners engage four-year-old learners in to develop their physical well-being. To establish this, during semi-structured interviews, the following research question was posed:

**RESEARCH QUESTION NUMBER 1:** What is the nature of practices ECD practitioners employ to enhance the physical well-being of four-year-old learners' readiness for Grade R?

"We teach learners motor skills so that they can take care of themselves with ease. Doing movement activities assists them to able to control bladder and bowel muscles. In the process, they also learn manage their own clothing." (P1)

"We engage learners in movement activities which allow them to manage themselves independently. They learn how to dress themselves and how to brush their teeth. This helps them. Should they have an accident when they are learning to go to the toilet, they will be able to change themselves into their clean clothes. It is important for us to allow them". (P2)

"Learners participate in fine and gross motor skills. We also encourage learners to communicate their needs to us. If they need to use the toilet, they should be free to say so. They also have to learn to communicate with fellow learners. Insufficient communication causes a lot of frustration for learners". (P3)

Although ECD practitioners engaged learners in motor skills activities, the above narratives confirmed my observations that there were developmental delays in some daily skills. These included toilet training, washing of hands and putting shoes on and off. According to Petit's Early Learning Journey self-care skills, also known as self-help skills, are abilities that children gradually attain to give them more independence. They include getting dressed, having a shower and brushing teeth. It is about learning life skills so they can look after themselves without depending on others.

The ability to communicate with others in the classroom including ECD practitioners and peers, and outside of school is associated with social and emotional developments. These skills influence how four-year-old learners interact with others, how they deal with their emotions, and how they react to events that happen around them. In this study, self-regulatory behaviours were most commonly observed in children during collaborative, learner-initiated physical activities. During these activities, I observed that four-year-old learners lacked patience and the ability to share toys with others. They had no idea about waiting for their turn, instead, they displayed outbursts and irritabilities as a way of expressing their emotions.

I also observed four-year-old learners use hitting, biting and pushing as a way to solve conflicts. They simply do not understand the difference between appropriate and inappropriate interactions yet. Lack of sufficient vocabulary added more to their frustration. Neuman and Wright (2014, p. 7) suggest that "reading books aloud to children is a powerful and motivating source for vocabulary development". This commences in a home environment where parental involvement is expected to be evident in reading bedtime stories and language elevating conversations. This is supported by Gnjatović (2015, p.86) who states that "the quality of the

language development depends on many factors like the home environment, language-rich experiences, child's well-being, physical health and intellectual development".

I further posed the following question to ECD practitioners to elaborate:

## Which daily activities do four-year-old learners struggle with?

"Toileting has been a battle. Some learners arrive at the ECD Centre having mastered toilet training. Suddenly, they start having accidents again". (P1)

According to Jacob, Grodzinski, and Fertleman (2016, p. 1), there are different methods to toilet train a child but "all involve encouraging the child in a supportive environment to recognise the need to pass urine or stool and then holding on until the potty or toilet is available". The interrelationship between potty training and toilet training is validated by Vermadel et al. (2008, p. 162) who state that "and intensive (toilet) training (child sitting at least three times a day on the potty) starts at mean 28.7 months". This training happens in the microsystem where the setting is favourable, and the trainer is not a total stranger. However, children will have accidents for a while after they have mastered toilet training, as it takes time and does not just happen overnight. A child may appear to have taken a backward step once the initial excitement of her toilet training has died down. Accidents are part of the training process. Learners may experience a sudden urge to pass urine while they are engrossed in play or other activities. There are common triggers for regression in toilet training. These triggers are emerged from the chronosystem when there been a substantial change in a child's life like a birth of a sibling or a death in the family. That can unsettle a child and regression is possible.

"The limited number of toilets make it difficult for some learners to hold urine until their turn to use the toilet comes". (P2)

"Other learners want to urinate there and then. They do not yet understand that they should go to the toilet in good time". (P3)

As per the above narrative by P3, I observed learners who did not realise ahead of time that they were about to need a toilet visit. I observed them suddenly grimacing, squatting, and some

unexpectedly running from the room. After my observations, I posed follow-up questions to ECD practitioners to get an in-depth understanding of the physical developmental delays. The following sub-themes were identified:

### 6.2.1.1 Self-care skills of four-year-old learners

According to Koksalan et al. (2017, p.210), "selfcare skills are one of the independent life skills, the foundations of which are laid during preschool period, and which should be acquired by children at an early age". From participant observation, I established that some four-year-old learners at the ECD Centre had not developed some self-care skills. I observed learners repeatedly having trouble with toilet visits, washing of hands, and putting shoes on and off. Participant observation enabled me to view learners in all domains of development. As illustrated in Figure 1.2, child development is interconnected as it involves developmental domains of physical, social, cognitive and emotional well-being. Because of their intertwined nature, these domains influence each other (Dordic, Tubic, & Jaksic, 2016; Gnjatovic, 2015; Rouhani & Fischer, 2013). As a child interacts with others (social) through play and other activities (physical), he/she begins to learn new words (cognitive) and is in control of his/her immediate impulses and temper (emotional). These domains do not develop in a vacuum but an environment or setting. In his ecological systems theory, "Bronfenbrenner uses the word 'ecology' to refer to settings and institutions that influence the growing human being" (Wahedi & Khanam, 2012, p.24). The ECD Centre is the microsystem in which participant observation was conducted. In the following section, I discuss all three aspects of self-care which I deemed problematic to four-year-old learners according to my findings:

## a) Toilet Training

Parents, including other older family members, become the first teachers in the life of a child. They become a dominant system from which daily self-care skills, like toothbrushing and washing of hands, are learnt. Toilet training is of foremost importance for ECD learners as it gives them independence (Butler, 2020). In this study, ECD practitioners expected four-year-old learners to be potty-trained before they started at the Centre. Although a lot of them could perform the basic self-care skill of toileting independently, this proved to be difficult for some.

To promote optimal development, according to the literature (Hackman, Gallop, Evans, & Farah, 2015), the household environment should (1) sustain the child (ensuring those elements that guarantee the biological integrity of the child), (2) stimulate activity in the child (aimed at the improvement of the child), (3) support the child's self-sustaining capacities and trends, and (4) control the quantity and pattern of experiences for the child.

However, in this study, it is evident that parents and other adults at home who form the microsystem did not give the learner sufficient independence skills. They did not give the child enough stimulation, support and experiences that would facilitate self-care skills of toileting. The insufficiencies of one microsystem, the home, got transferred to another microsystem which is the ECD Centre. This presented fertile ground for teasing and bullying amongst learners. The different types of bullying include psychological abuse, physical abuse (hitting and kicking), sexual abuse, verbal abuse (name-calling), cyberbullying and relational (ignoring another person) bullying (Boulton et al., 2014; Yoon, Sulkowski & Bauman, 2016; UNESCO, 2017). According to Wolhuter (2017) almost 80 % of South African children are bullied on their way to and from school and at school. The notion of 'bullying' is often associated with aggressive behaviour and power that is: intentional, repetitive, and an imbalance or abuse of power (Menesini & Salmivalli, 2017). The school microsystem is a dangerous environment for bullying "with most bullying occurring within the schooling situation" (Mahabeer, 2020, p.2; Yoon, Sulkowski, & Bauman, 2016).

In this study, I observed that bullying supported a hierarchical approach that instilled fear and overpowered victims as a result of their developmental delay in physical well-being. It was direct as it involved teasing. "*Ugogo onozwane uchamela umbhede*" ("The toe granny urinates on the bed") – This is a derogatory song that was sung by fellow learners to tease and belittle any learner who urinated or soiled on themselves. Through my observation of four-year-old learners, those who had achieved sufficient physical well-being demonstrated superiority and power over others. The fellow learners as a microsystem interfered with the development of their peers. They also ridiculed them by laughing at them openly and calling them names, making the school system to be unfavourable. This behaviour hinders social experiences as learners lack the confidence to freely mingle with their peers (Cempron, 2021).

I observed that most male ECD learners did not utilise a toilet when urinating. They stood against the fence or a trunk of a tree to relieve themselves. While most male learners wore loose,

elastic-waisted pants, most pants were twisted around the waist after urinating. This was an indication that the self-care skill of dressing up has not been properly grasped. It displayed that fine motor skills which are associated with manipulating small objects such as buttons and zippers and gross motor skills related to coordinating and balancing as they stand on one leg to pull on a pair of pants had not been properly mastered. However, this behaviour can also be attributed to poor toilet facilities. Although I observed that there are two newly built, modern toilets, most are largely ill-equipped pit toilets with poor sanitation.

To illuminate the issue of toilet facilities, this follow-up question was posed to ECD practitioners:

## Are you happy with the condition of the toilet facilities in the ECD Centre?

"The condition of our toilets is not satisfying at all. Most learners do not feel free of using the toilets as they have cracks, and some do not have all the needed walls. This is a problem as they use the bushes". (P1)

"We still have toilets which are basic. They are built over holes in the ground. These toilets are unhygienic, humiliating and are a threat to the lives of our learners. We understand that it is impractical to have all flushing toilets because there is a problem of water supply in the area". (P2)

"The state of sanitation is bad. The toilets are dirty, and we cannot use them as they are not safe. Toilets should be built properly to ensure the safety of learners". (P3)

The macrosystem, which pertains to socioeconomic status and poverty in the rural Mandlankala area, impacts the infrastructure of the ECD Centre including ablution facilities. According to the Gift of the Givers Foundation, in 2018 and in the aftermath of several deaths - the consequence of the unavoidable use of pit toilets at rural schools, a released report identified almost 4 000 schools with either inadequate sanitation or, worse, a complete lack of toilet facilities. The foundation mobilised a team tasked with discovering needy schools and identifying appropriate solutions. They piloted this project in KwaZulu-Natal, visiting 20 schools across the province, and discovered a host of educational facilities with broken toilets and others lacking any form of operational sanitation facilities.

In South Africa, demographic inequalities of apartheid are still evident. In some areas, dignity, health and safety of learners are continuously at risk. In its 2014 report, the South African Human Rights Commission stated that: "Those areas which lack water and sanitation mirror apartheid spatial geography. Former homelands, townships and informal settlements are the areas in which communities and schools, which are black and poor, predominantly do not enjoy these rights and many others. The lack of access to sanitation has an impact on other rights including rights to dignity, education, health, safety and the environment" (SAHRC, 2014, P.14).

While under apartheid education was compulsory for all racial groups, learner spending by the state was highly unequal by race and ethnicity and black schools in particular lacked basic services such as water and sanitation (Twenty Year Review South Africa, 2014). Schools particularly in rural areas and townships were also poorly maintained compared to schools in the mainly white urban areas. (DoE, 2009). Schools in the townships and some rural areas suffered damage as a result of the unrest following the protests of 16 June 1976. Vandals and arsonists damaged and destroyed many school buildings as well as school property. Intermittent unrest during the 1980s and early 1990s affected many schools during this time and initiatives by the government to improve school infrastructure were curtailed. By the end of formal apartheid in 1994, some inequalities had been reduced but spending on every white learner was still about 4,5 times higher than that for every black learner (DBE, 2011).

The macrosystem has laws and law enforcement practices, government agencies, political parties, social policies, health-care resources, economic systems, educational resources, media, and many values and symbolic forms of influence that create the social, political, and financial contexts for development (Bronfenbrenner, 1979, pp. 22, 25, 26). These laws (macrosystem) directly affect learners in their microsystem. Consequently, learners in rural settings the remnants of apartheid long after its disbandment.

Findings suggest that toilet facilities in the ECD Centre are not adequate, and their condition is appalling. This compromises the quality of the ECD programme as children under the age of five are exposed to environments with widespread faecal contamination (Pickering et al. 2012; Ngure et al. 2013).

## b) Washing of Hands

Formative years are critical for children to have health experiences as well as to learn about healthy habits like washing hands. This, in turn, avoids situations whereby ECD centres may offer poor health standards which may be inhibitive to their programmes. Eating without washing hands is detrimental to human health as it encourages "the transmission of listeriosis, as well as other pathogens" (Melariri et al., 2019, p.2).

Self-care skills like washing hands, dressing up independently, and brushing teeth thoroughly are daily behaviours that are learnt from a tender age. While performing these, four-year-old-learners are not only working on these skills but are also working on memory skills. Making these acts a routine helps learners remember to complete these tasks each day. The following question that was posed to ECD practitioners to provide clarity to the skill of washing hands:

# How do you ensure that four-year-old learners remember to wash their hands after each toilet visit and any other time when it is necessary?

"We establish a routine so learners always remember that they should always wash their hands before every meal. The hand washing sinks are child sized. This makes it easier for learners to practice independent hand washing, with appropriate adult supervision. Unfortunately, only a few learners remember to do this. We have to remind them time and again". (P1)

"I use a star chart where a learner earns a sticker each time, they wash their hands could work. That encourages them to remember to wash their hands." (P2)

"I congratulate a learner who has washed his/her hands openly in front of their peers. They love that so much. They feel rewarded for doing a good thing". (P3)

Fennis and Wiebenga (2015) support the establishment of routines and structure in the home microsystem. They state that absence thereof is negatively associated with psychological adjustment in children, family satisfaction, and school performance. From early childhood onward, the number of systems in which the developing individual actively engages increases gradually (for instance, home to school). As a consequence, this growing participation is both a cause and a consequence of development (Bronfenbrenner, 2006); interactions must occur regularly and over prolonged periods (Bronfenbrenner & Evans, 2000; Coley, Lynch & Kull, 2015; Berry et al., 2016). This study, therefore, suggests that these interactions should establish routines and structure.

The sight of a visual prompt near a hand basin with an illustration of someone washing their hands serves as a constant reminder that learners need to regularly perform this self-care skill. Visual learning is authoritative because "learners understand information better...when they see it" (Raiyn, 2016, p.115). This suggests that ECD practitioners understand the power of visual aids in helping learners grasp content. Child-sized handbasins make learners feel a sense of accomplishment and are more likely to engage in voluntary hand washing. This makes the environment supportive to exercise this self-care skill.

"We explain the 'why' because it is easier for learners to do things they do not necessarily want to do if they understand why it is important". (P2)

Practitioners elucidated that washing hands and using soap and individual towels are not only for keeping hands clean but help to eliminate germs that can make learners sick. The practitioners start a hand washing song and learners join in. This assisted in ensuring that hands have been scrubbed long enough and emphasised on routine. "We go to the toilet and then wash our hands, wash our hands, wash our hands, / We go to the toilet and then wash our hands before we go to circle" (to the tune of "Here We Go Round the Mulberry Bush"). There is still no approach or learning technique that is ordained as the most effective approach to be applied (Walton, 2014). However, the song and movement method is considered a technique commonly used for learners at the pre-school level. This is based on the fact that music, song, and movement are some of the teaching activities that are based on creativity and aesthetics (Pica, 2013). There are several studies relating to the use of the song and movement method for pre-schoolers in improving cognitive and motor aspects. This method can improve learners' critical thinking and literacy skills (Salmon, 2010). This method is also proven to provide opportunities to develop their motor skills so that they contribute to strengthening the bonds of friendship between children (Kralova & Kolodziejski, 2016).

Positive words and phrases of affirmation like "well done", "you are capable", "I know you can handle it" encouraged the efforts of learners who washed their hands after using the bathroom without being told. While doing this, they paired a learner's name with a positive phrase "I know you can do it Thakasa". The use of affirmations is based on the idea that "people are motivated to maintain self-integrity" (Cohen & Sherman, 2014, p. 336). Through my observation, such words created a positive belief system and positive self-perceptions for learners.

"No matter how much we talk about how they should wash their hands to avoid spreading germs which can make them sick, there are still some learners who do a shabby job. I first show them how to do it and then they practice". (P3)

ECD practitioners demonstrated how washing hands is supposed to be done. This is where the zone of proximal development (ZPD) becomes evident (Vygotsky, 1978). The ZPD is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance, or in collaboration with more capable peers. The zone of proximal development embodies a concept of readiness to learn that emphasises upper levels of competence. These upper boundaries are not immutable but constantly changing with the learner's increasing independent competence. Although this process of modelling was done flippantly, while the practitioner was exhibiting, it involved the learners in the thinking, the doing and all aspects of the process. I observed a progression of practitioners doing less and learners doing more. It started with the practitioner doing most of the work for one example, then less of the work for a second example, and escalated to learners doing most of the work. Even though ECD practitioners were always there to model how this skill is supposed to be carried out, most learners dried their hands on their clothes when they finished.

## c) Putting Shoes on and off

The fine-motor skills involved in learning to put shoes on and off are complex and the process is likely to take a while for four-year-old learners to master. I observed some learners sitting on the floor to put their shoes on and their feet kept slipping from their hands, falling to the floor. Others could reach their feet and then roll backwards on the floor. This escalates to learning to put shoes on the correct foot. The concept of left and right is foreign to learners of this age, and it takes some time before they can confidently recognise which shoe goes on which foot. Once this has been mastered, it suggests a certain level of physical and mental development. Many learners in this study have not reached that level. "When learners get to class, they take off their shoes. To limit the mixing of shoes, we use clothes pegs. We peg the shoes together such that the left shoe is on the left and the right is on the right. It makes it much easier for learners to get them on the correct feet". (P3)

Taking off their shoes immediately requires learners to become more aware of their surroundings. Their senses are heightened. This makes them pay attention. From that attention comes an appreciation of the natural world they are walking through. When all five senses are fully engaged, they completely connect with nature, and, after all, there is no better time than childhood to develop a love of being in the natural world.

Research has established that there are several reasons why it is beneficial for learners to go barefoot for the majority of their day. Due to the physiology of the foot, being barefoot contributes to the development of the brain and the nervous system. This is posited by Pica (2017, p.1) who states that it is "important to the development of the nervous system and to optimal brain development as well. It turns out the feet are the most nerve-rich parts of the human body, which means they contribute to the building of neurological pathways in the brain. Covering them in shoes, therefore, means we are eliminating all kinds of opportunities for children's brains to grow new neural connections". Earlier scholars like Baker and Bell (1991) argued that in early childhood, shoes are important for foot protection. However, there is a recent view that shoes can tighten foot movement and negatively impact walking, balance, sensory development, and proprioception (the understanding of our body's orientation in the space around us) while walking barefoot can help children develop a natural, healthy, walk. In an article titled When the shoe doesn't fit — why barefoot is best for children, Murphy (2010) states that "the human foot at birth is not a miniature version of an adult foot. In fact, it contains no bones at all and consists of a mass of cartilage, which, over years, ossifies to become the 28 bones that exist in the adult human foot. This process is not complete until the late teens". It is, therefore, important to allow the human foot to develop without any restrictions and limitations by allowing children to be barefooted.

### 6.2.1.2 Following simple directions and instructions

The ability to take simple directions and instructions is a prerequisite for four-year-old learners. As much as this is a cognitive function, it is usually followed by a physical reaction from a learner. Learners need to be able to act on requests by ECD practitioners and fellow learners. According to Dunham, Lee and Persky (2020, p.1) "Following instructions is an important

ability to practice in everyday life. Within an academic setting, following instructions can influence grades, learning subject matter, and correctly executing skills". However, parents need to inculcate and nurture this skill before the child engages in any formal learning environment. In the primary learning environment, it is expected that parents will engage in simple instructions and dire particularly in the most basic chores around the home. This can commence with simple self-care instructions like "take your shoes to the bedroom" or "put dirty dishes in the sink". This needs to extend to a learning environment where learners are required to follow directions which can be multiple. An ECD practitioner may instruct learners to take out their pencils and exercise books and copy letters of the alphabet that are on the board. Such an instruction is multi-faceted and requires a learner to have been exposed to listening and taking instructions sequentially as they are given.

"Some learners fail to follow instructions accurately and often misinterpret information. When you tell them to bend their knees, they appear to be distracted and non-compliant". (P1)

"They look at you blankly when you give them an instruction". (P2)

"They sometimes refuse to follow instructions and engage in another activity of their choose". (P3)

Through my observations, some learners avoided carrying out instructions by talking about something else to distract the person giving the instruction. Others looked to peers to work out what they needed to do during group movement activities. This act of imitation is supported by Meltzoff and Williamson (2017, p. 3) who state that "there is no question that children are avid imitators..." In doing so, learners do not miss out on working on gross and fine motor skills such as strength, balance, hand-eye coordination, agility, speed skills and development of social skills like turn-taking, cooperation, and vocabulary development.

According to Sowell (2017), teachers should avoid giving wordy instructions. I observed that practitioners were giving verbose instructions to learners. This resulted in unclear instructions which caused ambiguity. Instead, instructions should be concise. Table 5.2 below gives examples of how instructions must be carried out:

## **TABLE 6.2: A COMPARISON OF WORDY AND CONCISE INSTRUCTIONS**

**Source: Sowell (2017, p.12)** 

Wordy Instructions	Concise Instructions
<ol> <li>Now, I would like for you to get out a piece of paper and put it on your desk.</li> </ol>	1. Take out a piece of paper.
2. Once the paper is on the desk, could you please write down five questions using the present continuous tense?	<ol> <li>Write down five questions using the present continuous tense.</li> </ol>
<ol> <li>Now that you have written five questions, I would like for you to fold the paper in half.</li> </ol>	3. Fold your paper in half.
4. Now, when I turn on the music, please pass your paper to the person on the left, and I would like for you to continue passing your papers until the music stops.	<ol> <li>When the music starts, pass your papers to the left. Continue passing your papers until the music stops.</li> </ol>

In the above table, Sowell (2017) gives examples of how to craft instructions concisely. The idea of planning instructions in advance is emphasised by Scrivener (2012) so that practitioners are clear and concise when giving directions. It should be so clear that it provides a navigation map for any substitute practitioner who steps in in the absence of another. In this study, I observed that in instances when learners were given clear and unambiguous instructions and directions, their engagement was more effective and ultimately had more productive experiences.

## 6.2.1.3 Underdevelopment of Motor Skills

When asked about different practices employed to enhance the physical well-being of fouryear-old learner practitioners at the ECD Centre had this to say:

"I instruct learners to stretch out body parts. I also tell them to stretch and gently wiggle their toes, feet, legs, arms, and fingers. When I ask them gently to stretch their neck by looking from

side to side and up and down, some say they are tired. I suspect that they do not get enough sleep". (P1)

"When playing ball, I ask learners to use alternate feet for kicking or alternate hands for throwing. I make sure the ball is large enough to promote success yet small enough to present a challenge. We also put great emphasis on the development of gross and fine motor skills. The learners are encouraged to experiment and explore the wonderful climbing equipment that we have in our Centre yet very few show interest". (P2)

"We instruct learners to play games that involve running, hopping, throwing and catching. In this age group, learners are also introduced to a quiet time where they are expected to play educational games, do puzzles, or build with construction toys. They are encouraged to play quietly and to concentrate and focus their attention purposefully on what they are doing." (P3)

ECD practitioners displayed a great sense of awareness of what physical well-being means by instructing learners to engage both gross motor skills and fine motor skills. They knew that learners should possess the ability to move, coordinate and control their bodies. Learners were tested to control large parts of the body like arms and legs as well as coordinate small body parts which include hands and fingers. They gave four-year-old learners exercises that required jumping, kicking, standing on one foot, running, skipping and many others. Learners were also instructed to complete pictures that have missing parts, do simple crafts that include cutting pictures out of a magazine, pasting and folding pieces of paper, writing numbers and alphabets, buttoning up their jerseys, and opening and closing doors. However, some learners displayed no signs of being ready to engage in such activities. I observed that irrespective of how fun and engaging the above-mentioned activities were, some learners did not want to employ themselves in such activities. To bridge this gap, P2 gave non-participative learners play dough to create just about anything. This proved to be a way to practice fine motor skills, as it encouraged a variety of ways to use hands.

I cannot undervalue practitioners' understanding of the phenomenon which they displayed by involving learners in activities that allowed them to have control of each body part, encouraging them to use both sides of the body while singing a song, pointing at each part they are singing about. In one of my observations, practitioners instructed learners to participate in an imaginary dress-up activity. The act of putting on and taking off imaginary outfits, zipping up and down, tying laces, and using buttons has the physical benefits of developing fine motor skills.

ECD practitioners were creative in their offering, using freely available material for obstacle activities by using planks of wood as balance beams, boxes to climb into and crawl through as tunnels, old car tyres to jump into and climb over, and a ladder laid down on the ground to hop into. ECD practitioners displayed a clear understanding of physical well-being by employing physical activities which are embedded in classroom routines. Structured and unstructured physical activities were the order of the day. During or after story time, ECD practitioners encouraged learners to role-play parts of a story or to pretend to be story characters and imitate their movements and sounds. During the transition time, they also instructed learners to walk sideways or hop to where they needed to be.

"All movement counts. The more physical activities they do, the better". (P1)

Findings suggest that critical responsibilities and duties fall on families and ECD centres. The family microsystem, more specifically parents, provides opportunities for their children to obtain experiences appropriate to their age and development. Although not as recent, there is available literature that encourages the inclusion of children in studies that examine their behaviour so that information is obtained directly from them (Clark, 2010; Holmes, 2005). Şahin and Dostoğlu (2014) recommend also the participation of children in such studies so that researchers can attain the perspective of the children themselves.

# 6.2.2 THEME 2: CAUSES OF DEVELOPMENTAL DELAY IN PHYSICAL WELL-BEING FOR GRADE R READINESS

Developmental delay is when a learner lags behind their peers in one or more areas of growth. This theme focuses on causes of developmental delay in physical well-being for Grade R readiness as per the findings of this study. This study has established that delays in development are caused by external factors like insufficient parental involvement and poverty. During semi-structured interviews, the following research question was posed to elaborate on the state of physical well-being of four-year-old learners:

**RESEARCH QUESTION NUMBER 2:** How does the ECD centre promote the physical wellbeing of four-year-old learners for their readiness for Grade R?

## **6.2.2.1 Insufficient Parental Involvement**

To elucidate the importance of family and parental involvement, I posed the following question:

## What is the role of parents in cultivating the physical well-being of their children?

"A parent is a child's first teacher. Parents should be there to assist a child reach age-related physical milestones. That is not the only goal. Children learn about being healthy, taking care of themselves, being helpful around the house from parents". (P1)

"Correct supervision from parents can inculcate in children a good routine of performing ageappropriate house chores that would assist to achieve perfect physical development. Performing such chores also instils a sense of responsibility in children". (P2)

Four-year-old learners are expected to be able to perform several chores independently. They can also perform certain chores with parental supervision. These can be personal or family chores. Personal chores include making their bed with minimal parental help, getting dressed with minimal parental help, packing up personal belongings, like toys, after use and washing hands. Family chores include washing dishes with parental supervision, helping a parent carry lighter groceries, helping a parent prepare food, sorting colours for laundry, matching socks after the clothing is washed and dry. These chores are not gender-based. They can be performed by everyone.

To clarify insufficient parental involvement, I posed this follow-up question:

# Are there parents who display non-involvement such that they do not care about their children's education?

It is a predicament that in modern times there are parents who seem unaffected about the habitual absence of their children from school and delayed school entry.

"Even those who attend school usually miss it on Wednesdays because they have to take family cattle for a weekly wash". (P1)

"A well-off businessman from the area constructed a cattle wash facility in his homestead. He allows the community to wash their cattle at a fee on only Wednesdays. We have spoken to the parents about the boy's absence from school. They say their cows cannot miss the weekly washing. It keeps them healthy and safe from sicknesses and infections". (P2)

"The parents are of the view that looking after cattle makes boys strong. One parent said boys learn a number physical of skills in the field when they look after cattle. The parent mentioned stick fighting as one skill that makes boys sharp and physically strong. Such thinking makes us believe that we are fighting a losing battle. These parents are not on our side". (P3)

This study established that a disturbingly massive number of boys of preschool-going age spend some years looking after family cattle instead of going to school. This is the only chore they perform until they have passed school-entering age. In South African rural areas, livestock such as breeding animals like cattle, sheep, goats, and other longer-living production animals are treated as fixed assets. In such areas, they measure family wealth by the number of cattle the household owns. It then becomes a task of boy children to herd castle until they are delayed entering school. The delay in entering a school system has negative implications later in life (Chen, 2017). When they finally enter school, they develop a pattern of absenting themselves from school. They are religiously absent on certain days every week. Absenteeism is a critical issue in preschool and has a bearing on future attendance, retention, and academic performance (Connolly & Olson 2012; Ehrlich, Gwynne, Pareja, & Allensworth, 2014). According to this study, such behaviour hinders their learning, which has a more physical-centred curriculum.

As a follow-up to absenteeism and delayed school entry, I posed this question:

## What can be done to remedy the issue of absenteeism and delayed school entry?

*"There is a great need for parents to be there for their children, not only mothers, fathers too.* (P2)

*In this community, we do not see fathers playing a serious role in the education of their children. They are in the background, expecting women to take a forefront position*". (P3)

Our society imprecisely thinks that the term parents mainly refers to mothers (Lewis, 2014). This is also posited by Cowan and Cowan (2009) who state that many family studies use parent and mother interchangeably. Yet fathers are also parents who have to play a significant role in

the physical well-being and school readiness of their children. Recent literature reveals that there is a convincing movement pointing out to involvement of fathers in the development of children (O'Brien & Wall, 2017).

"Some parents are there but not there. They do not see a need for their involvement in the educational life of their children. They do not seem to care about the life of their children in general and the children's education in particular". (P3)

Sapungan and Sapungan (2014, p. 42) state that "regrettably, there are also some, if not many, parents who are quite passive in their child's education. Some of them are not directly involved. Sadly, some parents have obvious manifestations of their "I-don't-care" attitude". This destructive attitude of parents will potentially impact negatively on their children's performance and behaviour in a learning environment.

"Most parents have left the children in the care of other family members for numerous reasons. Some parents work far away from home and only return home at certain intervals. Others, especially mothers, have left home for good to get married and create their new families. Some fathers are not part of their children's lives because of cultural barriers". (P1)

South Africa has seen a growing social trend where grandparents play a parental role (Backhouse & Graham, 2013). In Mandlankala, finding children who are left in the care of grandparents and other family members including aunts and uncles is a common status quo. This is discussed in depth later on in this chapter. Parents leave home for various reasons. These include the creation of new families through a marriage where a relatively young mother will leave her child in the care of relatives (Choi, Sprang, & Eslinger, 2016; Sampson & Hertlein, 2015).

The momentous role of parents in the lives of their children assists them to flourish (Ceka & Murati, 2016). This extends to communities where parents are expected to create safe settings where they unite communities and support learners. The Education White Paper 2 bestows upon parents the rights to be involved in the education of their children. These include "The right of parents to be involved in schools' governance" and "the right to exercise authority in the home and engage in meaningful communication with teachers". They are even bequeathed "the right to be involved in planning and maintaining parents' groups". Yet the parents in this community

do not use any of the rights. However, they cannot be blamed for this because "parents believed that they should participate in their children's education but were ignorant as to how they should be involved" (Maluleke, 2014, p.58).

The mesosystem delineates the connection between each microsystem (Bronfenbrenner, 1977, 1994). This means that the interaction among the influential elements in the microsystem needs to take place from the mesosystem. As specified in the South African Schools Act 84 of 1996, effective education requires close cooperation between parents and teachers. However, Okeke (2014) believes that poor parental involvement is the biggest challenge facing public schools in South Africa, especially schools situated in rural areas. This poses a threat to the mesosystem. Before witnessing a partnership between the ECD Centre and parents, parental involvement in the physical well-being of four-year-old learners in preparation for Grade R commences at home "with the parents providing a safe and healthy environment, appropriate learning experiences, support, and a positive attitude about school" (Durišić & Bunijevac, 2017. P.140). The home system is expected to offer a setting that allows children to learn through play and other physical activities thus solidifying their fine and gross motor skills. It then escalates to an interaction between the ECD Centre and the parents and is beneficial as it reduces disruptive behaviours on the part of learners (Coutts et al., 2012, p.9).

There are education policies (macrosystem) like the Education White Paper 6 which reinforce parental involvement by suggesting that non-involvement and non-recognition of parents is a barrier to learning and quality education (Department of Education, 2001). The CAPS also highlights the importance of this involvement (Department of Basic Education, 2011). However, as established in this study, there are factors that prevent its sufficiency.

## a) Mothers as dominant parents

In this study, gendered parental involvement choice resulted in low participation of fathers in the early education of their children. This choice forces mothers to perform multiple roles which include having a job and, in some cases, more than one, doing daily chores, taking care of other family members, and being a wife. The situation exerts pressure on women who face stresses of daily life and other life interruptions like low salaries and strict work hours. Efforts for involvement of fathers in the lives and care of children have the potential of eradicating the injustice of gender inequality. Women who are in equitable and healthy relationships with men

who contribute to care work, experience lower levels of family stress, are less likely to suffer mental health problems, and derive greater satisfaction from their roles as mothers (Richter et al., 2011).

### b) Absent Fathers

Parents, a microsystem for their children, are also impacted by socioeconomic circumstances. In South Africa, the apartheid system which enforced racial segregation and exploitation subjected men to involuntary movement through the migrant labour system. This commenced in the early 20<sup>th</sup> century when "South Africa's pattern of oscillating migrant labour had been firmly established, with men being drawn from all over the country..." (Bank, Posel, & Wison, 2020, p. 8). Family structure was dilapidated as men lived and worked far from home while women remained to care for the children. South Africa has also been labelled as having high rates of "infidelity, mistrust, and interpersonal conflict between couples" (Lubbe, 2020, p.17; De Goede, 2018) which makes them part ways. This country has an extraordinarily high number of children who "live in a household where their fathers are absent" (Magqamfana & Bazana, 2020, p.169; Richter & Makusha, 2018). Reasons which make fathers absent include unemployment, poor socio-economic conditions, divorce, labour migration system, cultural beliefs and so forth (Eddy, Thomson-de Boor & Mphaka, 2013). Bronfenbrenner (1995, p.620) argues that "... human development takes place through the processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate external environment. To be effective, the interaction must occur on a fairly regular basis over extended periods of time. Such enduring forms of interaction in the immediate environment are referred to as proximal processes" (p. 620). Lack of daily contact presents social and developmental challenges.

In Mandlankala area, single parenthood is prevalent where mostly a mother is the only parent in the life of a child. This is due to appalling economic conditions and cultural factors which keep fathers away from their children. The African culture of *'inhlawulo'* predominantly plays a role in many rural settings (Eddy, Thomson-de Boor & Mphaka, 2013). *Inhlawulo* refers to "a fine imposed in reparation for an offense that has been committed especially when a man impregnates a woman out of wedlock" (Nathane-Taulela & Nduna, 2014, p.64). It is paid to a woman's family and is a form of acknowledgement of the 'damage' a man has caused. In several African traditional cultures, it serves as a gateway to allow a father access to his child.
A man who fails to cross this paternity point of entry by not paying the required damages is dismissed by the woman's family as irresponsible and useless (Nduna & Jewkes, 2012). The woman's family prohibits any contact between a man and his child and *inhlawulo* then becomes a barrier that impedes the much-needed father-child interaction. A maternal grandmother takes the responsibility of raising a child.

#### c) Grandparents assuming a parental role

In Sub-Saharan Africa (SSA), an estimated 15.1 million children have lost one or both parents (UN, 2015), and this has meant that grandparents step up and assume a parental role. In all societies, the death of a parent during childhood is widely perceived as having potentially profound consequences on the health and well-being of a child (Sherr, et al., 2014; Stein, et al., Richter, 2014). Parental deaths can be attributed to several causes including HIV/AIDS and TB, communicable, non-communicable, injury and undetermined (Herbst, Mafojane, & Newell, 2011). Orphanhood has caused an imbalance in a family structure where a 'generational skip' is triggered by the fact that grandparents take a parental position. Mejia-Pailles et al. (2020) place orphans in four different categories. "Non-orphan - both biological parents are alive. Maternal orphan - mother is dead or her survival is not known, father is alive. Paternal orphan - father is dead or his survival is not known, mother is alive. Double orphan - mother and father are dead or survival status unknown" (p.4). However, this study refers to any child whose single or both parents are deceased including those parents whose whereabouts are unknown as an orphan.

The South African government system through the DSD is playing its part in securing the lives of children through monthly social grants payable to deserving individuals. This system has targeted to secure the lives of orphans and other deserving children through different categories of social grants. These grants are implemented and administered by a separate national government agency, the South African Social Security Agency (SASSA) which is mandated by the South African Social Security Agency Act of 2004 to "ensure the provision of comprehensive social security services against vulnerability and poverty within the constitutional legislative framework". They include the Disability Grant (DG), the Child Support Grant (CSG), the Foster Child Grant (FCG) and the Care Dependency Grant (CDG) and are all financed through general tax revenues, collected on a national basis. The most commonly accessed form of assistance is the CSG, a means-tested, unconditional grant aimed at reducing poverty and promoting investment in poor children (Government of South Africa.

Child support grant 2019). This grant is currently at R460 after being increased from R450 in April 2021. Government efforts to improve the capacity and delivery of South Africa's social welfare system including the foster care arrangements and financial assistance for orphans are ongoing (DSD, 2019).

Grandparents are not young anymore. Taking care of four-year-old children requires physical vitality and mental soundness. These grandparents are more likely to face age-related issues. This is supported by Whitley, Kelley, and Lamis (2016) that when grandparents engaged in strenuous exercises, they tend to stress out, thus, resulting in health-related problems such as depression and other forms of mental anguish (Xu et al., 2020). Stress among caregivers, including grandparents, was a consequence of COVID-19 lockdowns where there were abrupt school closures, insufficient social connections, financial instability and other forms of uncertainties (Brooks et al., 2020).

This study acknowledges that HIV/AIDS remains one of the causes of death among parents of ECD learners in Mandlankala area. According to Joint United Nations Programme on HIV/AIDS (UNAIDS) (2017), Africa has been struggling to curb new HIV infections in young women (Abdool-Karim, Baxter, & Birx, 2017). With South Africa accounting for a third of all new HIV infections in southern Africa, this country has the biggest HIV epidemic in the world (UNAIDS, 2017). However, there is geospatial variation in HIV prevalence (Meyer-Rath et al., 2018). Among the nine provinces, KwaZulu-Natal (KZN) province of South Africa is characterised by a particularly high prevalence of HIV (Chimbindi et al., 2018; Shisana et al., 2018; Tanser, et al., 2017). There are several studies from KwaZulu-Natal which have ascertained high HIV prevalence (Kharsany et al., 2018; Kharsany et al., 2015; Abdool-Karim et al., 2014) in young women suggesting that the struggle against HIV continues.

Reasons for the high prevalence of HIV in KZN are multi-layered. They may depend on behavioural and cultural factors and include being unmarried or not living with a partner (Ramjee et al., 2016). Attached to high HIV infection rates, is the high pervasiveness of other curable sexually transmitted infections. With South Africa being recognised as the epicentre of the HIV pandemic (UNAIDS, 2018) despite the public HIV treatment rollout in 2004, trends in parental mortality and orphanhood in rural KZN need to be inspected closely and thoroughly. South Africa has made strides in fighting HIV prevalence. The government as a system is playing its role with South Africa having a national public-sector antiretroviral treatment (ART)

programme that is the largest in the world (South Africa Global AIDS Response Progress Report, 2015) and is domestically funded (DoH, 2016). Being the first country in sub-Saharan Africa to fully approve Pre-exposure prophylaxis (PrEP), this government is pulling its weight in counteracting HIV/AIDS (Shamu, et al., 2021). Pre-exposure prophylaxis (or PrEP) is medicine taken to prevent getting HIV. The United Nations is also playing its role through the UNAIDS 2016–2021 Strategy. This strategy calls for bold action to fast-track the AIDS response. It incorporates a human rights-based approach to development and aims to leave no one behind in the AIDS response. The strategy recognises sexual and reproductive health and rights issues, calls for comprehensive sexuality education and the removal of punitive laws, policies and practices that block an effective AIDS response, including travel restrictions and mandatory testing, and those related to HIV transmission, same-sex sexual relations, sex work and drug use.

The ecological systems theory confirms how child development is maintained and rooted within a set of close-knit structures, from immediate microsystems, such as the home and ECD centre, to more remote systems such as policies, neighbourhoods, laws, and social standards. The theory holds that these models are concretely established in learners' immediate experiences (microsystems). Thus, the priority for involvement between parents and ECD centre in the surrounding social, cultural, and political context (the macrosystem) is manifested in everyday support that learners' microsystems can provide for their learning and development. This study recognises hindrances to parental involvement in the development of a child, like HIV/AIDS and subsequently death, as well the emergence of grandparents as main caregivers.

#### d) Child-headed Homes

In South Africa, HIV/AIDS has surfaced as a major factor that causes child-headed homes although "there are also other factors such as migrant labour, failure of the extended family to absorb orphaned children, urbanisation, poverty..." (Chidziva & Heeralal, 2016, p.1). Such homes are defined by "the absence of a parent/caregiver, and by a child or youth assuming the role of primary caregiver in respect of another child or other children in the household, providing basic needs such as food, clothing and psychological support" (HSRC, 2021). They have serious implications for the well-being of children. Typically, children in these homes lack parental care, and are at risk of having to cope without adults and with poorer living conditions than their counterparts in mixed-generation homes. These factors destabilise the microsystem

of developing children and subsequently affect their growth. This impairs the mesosystem. There are no two microsystems that can work together for the betterment of a developing child. The role of the ECD centre in such cases is to provide a supporting microsystem on its own so that a child can have at least one microsystem to rely on. However, more child-headed homes have been created by the emergence of COVID-19.

Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. Since its emergence in late 2019, SARS-CoV-2 has caused illness (COVID-19) and death in all countries in the world. The restrictions put in place to reduce the spread of this virus have devastated economies and livelihoods the world over (WHO, 2021). By the end of June 2021, the WHO estimated that there had been 180.4 million cases of COVID-19 and 3.9 million associated deaths globally (WHO, 2021). This disease has left some South African children destitute because of the deaths of their parents. Globally, as of 5:45pm CEST, 22 October 2021, there have been 242 348 657 confirmed cases of COVID-19, including 4 927 723 deaths, reported to WHO. As of 21 October 2021, a total of 6 655 399 359 vaccine doses have been administered.

This pandemic is a social tremor that shocks even families which are financially stable and did not lose any income. It becomes a worse nightmare in situations where one or both parents succumb to the pandemic and children are left with no parental figure to care for them. "In summary, the research estimates suggest that every 12 seconds a child around the world loses a caregiver to COVID-19." This shocking finding was presented in a research report titled "Global minimum estimates of children affected by COVID-19 associated orphanhood and deaths of caregivers: a modelling study", published recently in The Lancet. According to this report, a study was conceptualised and produced by a multidisciplinary team of researchers at the University of Cape Town's (UCT) Accelerating Achievement for Africa's Adolescent (Accelerate) Hub, in partnership with the University of Oxford. The findings of this report disclose that South Africa has logged one of the highest number of deaths of main caregivers compared to other African countries in the continent. In cases where there is no adult, an elder child in the family has to step up and assume a parental role.

To fight the unmanageable spread of COVID-19, South Africa implemented one of the most severe response actions against the pandemic in Africa and worldwide (Carlitz & Makhura, 2021). This mainly consisted of a declaration of a national state of disaster on 15 March 2020 and the execution of a staggered series of nationwide lockdowns beginning with Level 5 - the

highest and severest level - on March 26, 2021 (Dlamini-Zuma, 2020). The stringent level of lockdown (level 5), lasted until the 30<sup>th</sup> of April 2020. It declared even travel and congregation including for work as non-essential and made it forbidden. Then came level 4 which forbidden most non-essential travel and gatherings between May 1 and May 31, 2020. Further lowering of the restrictions to Levels 3, 2 and 1 (with Level 1 being the least restrictive) were applied during the periods, June 1-August 17, 2020, August 18-September 20, 2020, and September 21-December 28, 2020, respectively (South African Government. COVID-19 / Novel Coronavirus 2021).

When South Africa thought the worst was over, the ruthless second wave emerged. The government had to tighten restrictions once more. As a result, the country was placed on adjusted Level 3 lockdown from December 29, 2020 (South African Government. COVID-19 / Novel Coronavirus 2021). One of the harshest results of the lockdowns has been wide-ranging job losses. Spaull (2020) states that approximately about three million jobs were lost between February and April 2020. This implied long-lasting anguish for the affected workers and their families. Here, an exosystem is evident where parents lose their jobs. A significant number of those who were lucky enough to keep their jobs experienced reduced earnings, a phenomenon not unique to South Africa (Coibion, Gorodnichenko, & Weber, 2020). Internationally, schools were suspended in 189 countries due to the pandemic thereby imposing enormous childcare strain on families (Ewing & Vu, 2020). This exerted more pressure on families who were already economically battling.

Throughout this section, reference has been made to the socio-economic effects of COVID-19, but there are also health effects. Much of the care of COVID-19 patients has occurred within the home microsystem due to strain on the healthcare system. This situation has placed additional burdens of care on women who are primary caregivers at home. With so many people having succumbed to COVID-19, there are significant household economic impacts that go alongside the emotional experience of losing family members. According to Townsend et al. (2021), COVID-19 patients suffer long-term after-effects of having been affected by the disease. This factor is likely to impact the ability of people to try to find and keep work and potentially will add further care burdens to the family.

For learners to perform exceptionally well in a learning environment, they need guidance and support from the important adults in their lives. This is emphasised by Đurišić & Bunijevac (2017, p.139) who state that "educators and parents play major roles in the educational success

of students" (Ceka & Murati, 2016). By simply being present and engaged with them throughout the day, ECD practitioners help them to learn and remember these self-care routines. These learners will need a lot of reminders. It may be a while before they can complete the tasks independently.

#### 6.2.2.2 The Interactional Nature of Systemic Poverty and Physical Readiness

In a revised white paper on families published on Friday the 2<sup>nd</sup> of July 2021, the Department of Social Development stated that while poverty levels improved between 2005 and 2011, they have since then stagnated and worsened – citing data collected from Home Affairs, Statistics South Africa and other government sources. Despite making great strides in economic transformation and development during the last two decades, South Africa continues to be overwhelmed by poverty and inequality. This country is viewed by recent United Nations Children's Fund (UNICEF) research to be one of the most unequal societies in the world and its 19 million children bear the burden of this disparity (StatsSA, 2020). This threatens their constitutional rights because they become victims of social ills and inequality that seem to lower a child's level of educational achievement (Mbarathi, Mthembu, & Diga 2016). It is, therefore, evident that the overwhelming rate of poverty and subsequently crime in Mandlankala area is pervasive. The following question was posed to determine the role that is played by families and the community:

# How supportive are households and the community in assisting four-year-old learners to achieve physical well-being?

"Most households in Mandlankala are low-income. Our learners live under extreme poverty. In this ECD Centre, we have a high number of learners who are orphans. Some children do not have fathers. Others do not have mothers. We also have those who do not have both parents. It is really a sad situation". (P1)

"Concentration of poverty negatively influences child health and physical development. It negatively impacts the health and well-being of children because families struggle to put food on the table. You find that those who can afford some food buy basics like mealie meal and beans. They cannot afford a range of fresh fruits and vegetables." (P2) "Poverty itself can negatively affect how the body and mind develop, and economic hardship can actually alter the fundamental structure of the child's brain. The child may end up unable to reach expected physical milestones". (P3)

Statistics South Africa (2021) has published its updated national poverty lines for 2021. They have drawn three lines – the food poverty line, the lower-bound poverty line, and the upper-bound poverty line. The three lines are clarified as follows:

- The **food poverty** line is now **R624 per person per month**, up from R585 previously (+6.7%). This refers to the amount of money that an individual needs to afford the minimum required daily energy intake. This is also commonly referred to as the "extreme" poverty line.
- The **lower-bound** poverty line is now **R890 per person per month**, up from R840 previously (+6.0%). This refers to the food poverty line plus the average amount derived from non-food items of households whose total expenditure is equal to the food poverty line; and
- The **upper-bound** poverty line is now **R1,335 per person per month**, up from R1,268 previously (+5.3%). This refers to the food poverty line plus the average amount derived from non-food items of households whose food expenditure is equal to the food poverty line.

While the updated national poverty lines help establish a government baseline, they do not accurately reflect the predicament of many poor South Africans, who often end up substantially worse off as they provide for themselves and their family members, especially in rural areas like Mandlankala where unemployment is rife. This is supported by the Pietermaritzburg Economic Justice and Dignity group (PMBEJD) which states that approximately 30.4 million people in South Africa live below the old upper-bound poverty line of R1,268. The group estimates that 13.8 million people live below the food poverty line.

The group's data shows that food prices increased significantly over the past year – rising 10% between September 2020 and August 2021 – far outpacing headline inflation. "The maximum wage of R3,643.92 in August 2021 when disbursed in a Black South African family of 4.3 persons is R847.42," the group said. "This is below the upper-bound poverty line. Set at such a

low level, the national minimum wage works to institutionalise the low-baseline wage regime and lock millions of workers into poverty."

This study has established that four-year-old learners in Mandlankala area live in an impoverished neighbourhood. Such neighbourhoods have the potential of exposing their inhabitants to environmental risk factors. These socioeconomic risk factors include and are not limited to malnutrition, food insecurity, housing instability, and crime. Learners from such neighbourhoods are excessively more likely to attend schools in areas with fewer resources, less funding from government organisations, less parental involvement due to longer, lower wage working hours, inadequate facilities, and school leadership that has a much higher turnover.

In 2020, Statistics South Africa stated that more than six out of ten children (62,1%) are identified as multidimensionally poor. StatsSA (RSA, 2020) further stated that Black African children (68,3%) show the highest percentage of multidimensional poverty as compared to their peers from other population groups. Multidimensional poverty is highly prevalent amongst double orphans (77,3%) and paternal orphans (75,0%) as opposed to non-orphans and maternal orphans. The report shows that more than twice as many children living in rural areas (88,4%) face multidimensional poverty compared to children in urban areas (41,3%).

#### **6.2.3 THEME 3: THE IMPACT ON THE LEARNERS**

#### 6.2.3.1 Low self-esteem

Through my observations, learners want to be the best in whatever they do by equating and comparing themselves with others. When things happen adversely, they get withdrawn and perceive themselves as incompetent. I made a follow-up on my observation by posing the following question to ECD practitioners:

#### Are learners confident when performing physical activities?

"These learners lack self-esteem. They lack the ability to try new things and try again when things do not go as planned. This does not start here. It starts at home. Our four-year-old learners are at a stage where they are able to do some things all by themselves. They feel good about themselves when they can use their new skills. Their self-esteem grows when parents pay attention and give a pat on the back. If there is no show of praise and approval from parents and other adults at home, no matter how children try, their self-esteem goes down". (P1)

According to the Centre for Integrated Healthcare (2013, p.1), "Self-esteem is a way of thinking, feeling, and acting that implies that you accept, respect, and believe in yourself". Learners can react to their own apprehension in different ways. One learner's chief concern is with the value of succeeding, of expanding his powers. He/she ignores the fear and marches forward and the fear dissolves. Another child is primarily concerned with fear. It is of far more importance to him/her than the opportunity to grow and to master the unfamiliar, so he retreats, and the fear masters him, instead.

"Our learners do not want to face challenges. They prefer to avoid them. We try everything in our power to encourage them. We have resorted to paying attention to what they do well and enjoy. We understand that we need to focus more on their strengths than weaknesses if we want to help them feel good about themselves. This improves behaviour too". (P2)

"We have noticed that self-esteem grows when our learners get to see that what they do matters to us. When a learner who could not paddle a bicycle achieves this milestone, we make a big deal of it. We all clap our hands and ululate. This makes them proud and willing to try more physical activities". (P3)

This suggests that encouraging words used by parents and practitioners can have powerful positive effects on children. This is because positive reinforcement can condition them to repeat the praised behaviour. Such words include "Well done", "Good job" or "You're so smart". Any young child raised in a microsystem with parents and carers able to respond with love, understanding, and clear common-sense guidance, has an excellent chance of learning how to relate to other people. First, the child discovers other people are fun to be with, that they will look after you, and make you happy. Then later, the child learns others have rights and needs of their own, and that, by studying the feelings of these others, it is possible to make them happy too. So begins the child's pathway to being at ease with himself and with others, which generally leads to the development of a confident and articulate adult who can be independent and yet also respect other people.

#### 6.2.3.2 Learners' Non-Compliance

# What causes learners to defy the instructions of ECD practitioners during physical activities?

"In this pre-Grade R class, there are learners, mostly boys, who are older than four years of age because of delayed school entry. Compared with their younger classmates, they have a lot of responsibilities at home, helping their parents with chores like looking after the cattle. These learners tend to be easily irritable when they attempt to do a certain physical activity and fail. The younger ones are also partly to blame because they sometimes laugh at the older ones. We tell them to stop it. The older ones end up refusing to take directions and instructions from us. It does not end there. Their behaviour, in general, becomes bad". (P1)

Learners thrive in stable and nurturing environments where they have a routine and know what to expect. As learners delay school entry and some are habitually absent, they experience a dramatic change in their lives and that can be stressful and affect learners' feeling of security. "Problems arise if the child feels inadequate and inferior to this adaptive task. If learners have to struggle inwardly with a sense of guilt and feelings of unworthiness, inadequacy and inferiority, it is most likely that their behaviour will not conform to what is expected by society or required for purely practical reasons; in other words, their behaviour will tend to be maladaptive" (Marais & Meier, 2020, p.45).

ECD practitioners have a task of giving them support. Within the context of supportive relationships with adults who act as a cushion against any negative effects of instability, they learn how to cope with adversity, adapt to their surroundings, and regulate their emotions.

"A general feeling in this community is that learners skip preschool and go straight to Grade 1 because they feel too old for preschool. Parents of these learners have no idea how much their children miss in terms of school readiness". (P2)

I observed the presence of older boys in classes who did not take any instruction from practitioners. The vicious cycle of poverty in the family grows bigger and bigger because such learners fail in school, repeat classes and eventually drop out. Unemployment in the community becomes inevitable and poverty grows out of proportion

#### **6.2.4 THEME 4: ENGAGEMENT OF ECD PRACTITIONERS**

#### **6.2.4.1 Expectations of Practitioners**

#### a) Practitioner Development

ECD practitioners from low-resource communities like Mandlankala may find it challenging to deliver a developmentally appropriate curriculum to support child development due to the increased possibility of physical developmental delays. Practitioners rely on their ECD knowledge when delivering ECD programmes but most in this community are underqualified. The knowledge and needs of practitioners from low-resource communities need special attention to develop and implement appropriate support services (Smit et al., 2021).

"Most of our staff is not qualified for the job. If we were qualified for the job, who knows, maybe we could be better at what we do. We need to be trained to a level of those who have the qualifications" (P1)

"How I wish I had a Further Education and Training Certificate: Early Childhood Development (NQF Level 4) or a Higher Certificate: Early Childhood Development (NQF Level 5). This is only but a dream". (P2)

"I only hear about ECD qualifications. I do not know how to go about getting them. Moreover, I have no money to pay for my education. If a good Samaritan can offer to assist, I can jump at the opportunity". (P3)

The findings indicate that the practitioners are aware of the importance of having gained the knowledge and skills to teach young children through obtaining qualifications. The findings correlate with Rathus' (2006) statement that practitioners' qualifications are vital and essential for children's growth and development.

According to a report by Ilifa Labantwana, Kago Ya Bana, and their funders (2018, p.6), "ECD, including practitioner training, is a national priority". The government is committed to scaling up ECD over the next decade to achieve the goals of the National Development Plan (NDP). In terms of finance, the immediate priority is to find another R7 billion for ECD interventions in the next three years, then a further R11 billion by 2025, and another R16.3 billion by 2030. This calculation was made at 2018 prices. As far as human resources are concerned, 210 000 more trained ECD practitioners (playgroup facilitators, trained childminders, or those based in early

learning centres), and a further 140 000 assistants, to achieve universal coverage of early learning. Universal coverage is assumed at 69% of children 0-5 years of age are in centres, 9% receiving home visiting, 16% in childminding programmes, and 6% in playgroups. The government also looks forward to having a central agency to coordinate and drive large-scale cross-cutting programmes for children and systems place for an ECD Index to track children's progress, milestones and outcomes at municipal, provincial and national levels.

*"Although practitioner qualification and continuous development are a necessary investment, it is a human being that teaches a learner, not a piece of paper(certificate)". (P3)* 

A practitioner is expected to provide a "warm and continuous attachment" (Adriany & Warin, 2014, p. 317). My observations established that the caring nature of a practitioner leads to desirable behavioural outcomes in children.

The Organisation for Economic Co-operation and Development (OECD) - Teaching and Learning International Survey (TALIS, 2009), defines Continuing Professional Development (CPD) as "the one which involves those activities that develop an individual's skills, knowledge, expertise and other characteristics as a teacher." A practitioner needs non-stop development because "the teacher educators are required to continually update and equip themselves with ever-increasing skills and competencies to always remain top-notch in their profession and do justice to society" (Srinivasacharlu, 2019, p.30).

"Through continuous development workshops that are held here on site, I have learnt that it is not expensive equipment that determines how well children learn. We have been taught to make a skipping rope using a bread bag. It does the same thing as the one bought from a shop. Learners get the same physical activity". (P3)

"We make educational equipment by using recyclable material and plastic. This has helped us a lot because we do not have enough money to buy toys. Our learners collect plastic bottles and lids, bread bags to make different learning material. While they are helping us, we have warned them how hazardous some recyclable materials are". (P2)

Continuous practitioner development is necessary for both learners and practitioners. Learners who are taught by practitioners who have received training on classroom physical activity have higher levels of physical activity per week than those taught by teachers without this training (Ward, 2011).

#### b) ECD Centre Upgrades

"This Centre is not registered because it does not meet the requirements. This makes it difficult to get funding and necessary upgrades to ensure that our learners receive quality early learning programme in an environment that is safe, secure and hygienic". (P1)

According to the Children's Act No. 38 of 2005, ECD centres must register as a partial care facility and/or after-care services with the Department of Social Development if they are looking after seven (7) or more children and must adhere to the Minimum Norms and Standards. The DSD monitors the centre for one year and does an assessment of the services offered by the centre, including the general care of the children, administrative systems and financial systems. If satisfactory, a full registration certificate will be issued (valid for 2 years) and a subsidy may be paid. If not satisfactory, the provisional certificate will be extended for a further 6 months during which a subsidy may be paid. If the centre does not meet the minimum standards after these 6 months, it will be shut down.

"The ECD Centre needs a major renovation. The roof is leaking in most classrooms. The whole Centre needs a fresh coat of paint". (P2)

"The number of children in the Centre goes up every year because we are the only creche in the area. Classes are becoming full. We definitely need new buildings". (P3)

According to the DSD, a centre has to re-register when an applicant intends to move the centre to another building or premises, extend or decrease the size of the existing structure, increase the number of children enrolled, sell the business, or change ownership.

Although the Department of Social Development (DSD) provides a subsidy in the form of financial support for registered ECD centres, most centres utilised in this study were not registered. The reason for this is that ECD principals, particularly in low socio-economic areas, were generally unable to register their centres because they do not meet infrastructural standards such as an adequate number of windows in the classrooms, or the building type and structure were substandard. Therefore, most of the ECDs in this study were unable to access financial support from DSD. Without access to government funding, these centres cannot make the necessary structural improvements or repairs and are thus frozen in the unregistered category,

resulting in a lack of funding with which to upgrade, improve or maintain their current structures. This finding compares well with reports from studies showing inadequate funding or poor allocation of funds to low socio-economic schools (Sibiya & Gumbo, 2013; Jordanova et al., 2015).

#### c) Education Equipment Provision

"We expect this Centre to provide material which will assist us in teaching and developing learners in all spheres". (P1)

"We need more education equipment. By working with educational equipment, learners acquire essential developmental skills, such as fine and gross motor skills, observational skills, handeye coordination, problem-solving skills, as well as the recognition of colours and shapes". (P2)

"By having a variety of education equipment, we will give learners more than what we are giving them now". (P3)

Appropriate instructional materials and a context where young children have a space to be physically active are important conditions for good quality ECD (UNESCO, 2015). According to Oke (2016), an instructional material is a tangible or physical item that provides rigorous, visual, or both to the five senses during teaching and learning. ECD centres are expected to provide toys and materials which are appropriate by matching the stage of development of the learners. The availability of a range of toys will accommodate differences between individual learners' skills, interests and characteristics.

"It should not be any toys; it should be toys which fit the learners. Age-appropriate toys also assist learners in developing their life skills, numeracy and literacy skills, especially their vocabulary." (P1)

"We need material that is durable and safe to use. These include puzzles, balls, bean bags, games, blocks, laces, beads". (P2)

"This is always linked to skills training which informs ECD practitioners on the use, maintenance and safe storage of education equipment. This equipment supports teachers in the practical implementation of lessons learnt during ECD training." (P3)

In my observations, I established that practitioners were conscious of the indigenous materials available in the surroundings and used them to create puzzles like *umlabalaba*. They understood their circumstances. Instead of selecting sophisticated and expensive materials, the creative practitioners used available, durable and easily replaceable yet challenging materials. All the materials were attractively arranged in the classroom so that learners can take them out themselves and put them back on. This, in turn, will help them learn to be responsible.

#### d) Family Outreach Programmes

Visiting a parent and a learner in their own home allows for an integrated holistic approach tailored to that learner's needs. This is particularly beneficial for learners with developmental delays who may need additional individual attention. Their nutrition, health, hygiene, and enhancing learner stimulation, and responsive interactive parenting can all be addressed in a supportive manner. Home visits provide an opportunity to praise good parenting, discuss good ideas give additional support where it is needed.

"This Centre needs to reach out to parents through home visits. These visits can be conducted by our onsite practitioner assistants because like us, they interact with learners on a daily basis. They know the learners well enough to discuss their progress or lack thereof." (P2)

These home visits provide support, advice and hands-on, practical guidance on various topics including health, nutrition, child safety, discipline, cognitive development, assistance with accessing social assistance grants, as well as creating educational toys and resources from recyclable materials. Here, the Mesosystem of Bronfenbrenner's Ecological System Theory is evident where two microsystems work with one another for the benefit of a child.

"We should involve the community by inviting them to meetings to openly discuss our programmes. This will help to get the message out about the importance of our activities". (P3)

The general idea is to engage the community in discussing, planning, decision making, implementing, monitoring and evaluating of all childhood development activities from the outset.

#### e) Sharing of Knowledge

No man is an island. This centre should be involved in sharing of knowledge and information within the ECD sector. This can be done by interacting with other ECD centres although this poses a challenge because there are very few ECD centres in Northern Zululand.

"There are few places where ECD stakeholders can obtain quality ECD resources, materials and information required to run effective ECD programmes and ECD facilities." (P2)

"Working in the education system means we cannot work alone. We need to liaise with ECD practitioners from Esikhawini, KwaDlangezwa, Empangeni and Richards Bay to get information and resources. The University of Zululand does offer foundation phase studies. We need to reach out to them." (P1)

The practitioners realise the need to continue to build their wealth of professional knowledge and through collaboration. If they join forces and work in partnership with colleagues from other institutions, they will not be stagnant. Such collaborations have been destabilised by the rift between the Departments of Basic Education (DBE) and Social Development (DSD) in terms of ECD governance. The national government has been attending to this and it was only in March 2021 that the two departments briefed the joint sitting of the Portfolio Committees on Basic Education and Social Development on the progress relating to the ECD migration from DSD to DBE. This is a result of President Cyril Ramaphosa's announcement during his State of the Nation Address (SONA) in 2019 that ECD should migrate from DSD to DBE. Both Departments pledged that during the transition process, there will not be any interruption to service delivery, and they will continue to work collaboratively in this regard.

# 6.2.4.2 Lack of Practitioner Confidence

#### a) Undermining of ECD Practitioners

"The parents of our leaners do not understand ECD, they think that we just feed children and send them to sleep. They do not understand the educational activities which here". (P1)

"We teach our learners in a way that an outsider may think that we are playing. Teaching fouryear-old learners is not child's play. It is a complex, multidimensional process. People do not see that. Not that we want them to. They just need to respect our profession and appreciate us. People forget that we are doing the most important work in the building of the nation. Most people do not value the hard work we do. They think we are just nannies who look after the children for the whole day. We do not feel appreciated. The morale amongst us is low. That is why we are tired from Monday to Monday". (P2)

"Our skills are looked down upon. It is offensive that people have a perception that anyone can teach these learners. People need intensive training to do this job. But the blame is not entirely on the people on the ground. The government is also to blame. The delay in the formalisation of Early Childhood Development by the government made everyone undermine the true value of ECD practitioners. At present, we are employed by the ECD Centre. We are given a stipend at the end of the month". (P3)

Ortlipp, Arthur, and Woodrow (2011, p.33) are of the view that "when others (the public) are better informed about what the ECD educators do, they are more likely to see this as a professional practice and this outside positioning can impact on how the practitioners see themselves". The way practitioners are viewed influences their quality. ECD practitioners are uncertain of who they are in the education sector. This emanates from the way they are perceived by the general public.

"Members of the community think that we are just nannies. This really saddens me". (P2)

#### b) Inadequate Remuneration

Money is a crucial incentive to work motivation. It is a medium of exchange and the means by which employees can purchase things to satisfy their needs and desires. It also serves as a scorecard by which employees assess the value that the organisation places on their services. Ford (2019, p.2) cites Taylor who states that pay mainly motivates workers and recommended several suggestions on how human resources should be managed in order to produce optimum results.

"When we started working here things were really bad. We were exposed to intolerable and detestable conditions at the workplace. We worked for the whole month without knowing whether we will get paid at the end of the month or not". (P1)

"The safety of our jobs is not guaranteed. Who knows? Maybe we will be jobless tomorrow". (P2)

*"Our pays are now regular. We still work without benefits. We have no UIF and no pension".* (P3)

The above narratives illustrate that ECD practitioners have needs for fringe benefits and pensions that are not met yet. This brings us to the idea of prioritised, hierarchical structure of needs which takes us back to Plato who states that "But the first and greatest of our needs is the provision of food to support existence and life...The second the provision of a dwelling place, the third of clothing, and so on" (Plato, Republic II, 369). In the 1940s, Plato's idea was reiterated and improved by Maslow (1943).

In 1943, Maslow introduced his "hierarchy of needs" theory, in which he stratified human needs in order of precedence (Maslow, 1943). This theory is typically represented graphically as a pyramid with five levels (Mintzberg, 2009). Level 1, the bottom layer, is where basic human "physiological needs" reside. These needs include food, water, shelter, and other necessities for life. The second layer consists of "safety," which includes security, order, stability, and protection. The third layer is denoted as "love and belongingness needs," including social acceptance, intimacy, receiving and giving affection and other related needs. The fourth layer has to do with "self-esteem." This level includes factors such as dignity, self-respect, achievement, mastery, and similar traits. The ultimate level, or "self-actualisation," involves fulfilling one's potential, finding self-fulfilment, and seeking personal growth (Maslow, 1943). There is also evidence from Maslow's correspondence that he intended to add a sixth level of "meta-needs," meaning the need for knowledge, truth, beauty, and harmony (Guest, 2014).

When applying Maslow's Hierarchy of Needs in the workplace of ECD practitioners, one needs to understand the needs and how they impact motivation. Each need builds on the last, allowing a person to feel more fulfilled, which in turn encourages motivation and creative thinking.

# *i) Physiological needs*

When applied to the workplace of ECD practitioners in this study, one of their physiological needs is a steady and adequate remuneration to support themselves and pay for their housing, food, utilities and other essential needs.

# *ii) Safety*

Feeling emotionally safe is an aspect of safety in the workplace. In this study, ECD practitioners are worried about job security. It is more challenging to achieve motivation to move to the next level in the hierarchy and perform at your highest level. Unsteady futures also lead to decreased morale in the workplace.

# *iii)* Love and belonging

If one does not feel a sense of belonging, one may not feel as engaged at work or as motivated to succeed. It is not always easy for individuals to establish and form relationships at work. When one feels feel like one belongs and fits in within a workplace and a team, it is easier to feel motivated to work hard and achieve results.

# iv) Esteem

Esteem speaks to the belief that one is contributing to a higher goal and that the contributions one makes are recognised. In this study, a higher goal is seeing four-year-old learners achieve readiness for Grade R through physical well-being. While doing this, it is important for ECD practitioners to feel that they are growing, advancing and achieving results, and that those around them recognise those results. That plants a seed of confidence in themselves and their abilities.

# v) Self-actualisation

The final level of Maslow's Hierarchy of Needs is self-actualisation, which translates to maximising an individual's potential at work. A person ultimately wants to feel they are doing the best they can in their position, which helps them feel motivated to continue on their career path and succeed. A self-actualised employee feels empowered and trusted, which encourages growth and engagement. ECD practitioners in this study have not reached this level.

#### 6.2.5 THEME 5: CONCERNS OF ECD PRACTITIONERS

#### **6.2.5.1 Tiredness of Learners**

To engage in all learning activities properly and adequately, learners need to be physically fit and healthy. They should be sufficiently energised to participate in activities in class and outside (Barbarin et al., 2008; Erwin et al., 2012; Martin & Murtagh, 2017; Watson et al., 2017). Yet learners arrive at school tired.

"We have learners who live very far from the Centre and there is no transport to bring them *here*". (P1)

"Some learners arrive here looking very tired. We have learners who travel long distances to get here. When they get here, they are already tired". (P2)

"A number of our learners take naps during learning time because they are hungry. This behaviour is disturbing". (P3)

For most learners in this study, getting to school every morning remains a daunting task as they have to walk a long distance and for some on an empty stomach. As a result, learners struggle to concentrate or stay awake in class. It is normal behaviour that most learners of this age take naps during the day. However, a need for poorly timed or frequent naps may indicate that a learner is not getting enough sleep at night or is having poor quality sleep or has a sleep-related illness. In my observations, some learners displayed decreased levels of alertness and mood swings.

#### 6.2.5.2 Lack of Resources

#### a) Water Crisis

There is an overwhelming need to provide good quality water so as to deliver hygiene practices that are essential for the survival and development of children (Darvesh et al., 2017). In Sub-Sahara Africa, improvement of drinking water sources and sanitation ranks at a low level (Roche, Bain, & Cumming, 2017). Yet water is a basic physiological need.

In South Africa, infrastructure is an enormous challenge to ECD provision (HSRC, 2010). There is a huge infrastructural imbalance in ECD centres that are located in different geographical spaces. According to a study conducted by UNICEF, DSD, DoE, and the National Treasury (2011), most ECD centres which are situated in rural areas are unregistered. The study established that those unregistered facilities had a significant number of buildings that were rated as being "in a bad or very bad condition" (DBE, DSD & UNICEF, 2010). The ECD Centre in Mandlankala area is poorly equipped. They function without sufficient ablution facilities.

"This ECD Centre does not have enough toilet facilities to accommodate all learners as per Department of Social Development (DSD) requirements". (P1)

"We need a consistent supply of water. It is a basic need". (P2)

"In this area, there is limited access to electricity and running water". (P3)

#### According to The Mercury (20, July 2021):

"Currently, all reservoirs are dry, which poses a great challenge to areas of eSikhaleni Cluster, namely, Mpembeni, eSikhaleni township, Gobandlovu, Madlankala, Port Dunford, Felixton, Vulindlela, iNiwe, Dlangezwa and outer lying areas".

The above newspaper article mentions Mandlankala area as one of the areas which face water shortages in UMhlathuze Local Municipality. This study is located in Mandlankala area. Although Mandlankala is a rural area, it is situated in Mhlathuze Local Municipality which is the third largest municipality in KwaZulu-Natal. Mthethwa (2018) states that there is a huge demand for water supply in Mhlathuze. According to the National Business Institute (NBI) News Update 2020, South Africa has experienced significant water shortages since 2014, with heavy restrictions still in place in many parts of the country. The country faces a global phenomenon where water is constrained from both an availability (quantity) and fitness for use (quality) perspective. This is driven primarily by:

- Rising water demand coupled with rapid urbanisation
- Inadequate investment and maintenance of water infrastructure
- Capacity constraints within water authorities, including a shortage of priority skills
- Droughts driven by climatic variability and climate change

This situation is worsened by South Africa being a water-scarce country that receives roughly half the world's average rainfall.

Since 2016, the NBI has taken an initiative to partner with Mhlathuze to conserve water. The NBI is a co-convenor of the UMhlathuze Water Stewardship Partnership (UWASP), which works to reduce water risk in the Richards Bay area. The partnership has made considerable strides in supporting improved water conservation and water infrastructure management in the action of collecting rainfall.

One of the goals of the National Integrated Early Childhood Development Policy is to ensure that by 2030 all infants and young children living in low socio-economic areas, which include rural and informal urban areas, have an adequate supply of safe drinking water, sanitation facilities and adequate hygiene practices (Department of Social Development, 2015)

#### b) Outdoor Play

"We learnt during one of our in-service trainings that learners need a lot of unstructured playground time to benefit their developing bodies and brain. All of these activities are beneficial to the physical development of a young learner. When learners are playing, they are using their bodies in a healthy way". (P1)

The oxygen that goes into the brain during physical activity does a lot for learners. As they play, oxygen is sent to their muscles while at the same time producing endorphins that have positive effects on their mood and activity level. I do not know what endorphins are, but I know that they bring happiness". (P2)

"When children play, they grow. We need to make them play more". (P3)

Active outdoor play is "a form of gross motor or total body movement in which young children exert energy in a freely chosen, fun, and unstructured manner" (Dietze & Kashin, 2019, p.164). Information on how much time young children spend in it daily is limited to a few studies. Most studies are Canadian (Moore & Cosco, 2019), Australian (Dietze & Kashin, 2019; Gill, 2019), Swedish (Talan & Bloom, 2018) and American (Smirnova & Riabkova, 2018). In the South African context, this kind of play has always been supported by parents in our yards or nearby recreation settings and parks. However, there has been a decline in this and a general preference to keep children indoors and rather let them engage in inactive pursuits indoors at home, such as screen-based or digital media activities, than their parents or grandparents due to safety risks (Bassett et al., 2014; Larson, Green & Cordell, 2011). At a tender age, children run the risk of

self-exposure to hazardous situations because of a lack of experience. The question is how we strike a balance between risk and safety because it is a risk that children push their boundaries and gain developmental benefits, which they would not otherwise be exposed to.

While this study encourages children's exposure to the great outdoors, there is an even greater risk and fear of children going missing. Despite extensive child protection laws, children's rights in South Africa are still being violated immensely (Emser & Van Der Watt, 2019) and violence against them remains unreported and unrecorded (Optimus Study, 2016), partly due to the culture of silence that permeates our society. Emser and Van Der Watt (2019) further state that 25% of approximately 1600 South African children who have been reported missing have never been found. In rural areas, the situation is worsened by a submissive cultural belief that children must respond positively to any adult. Amid submissiveness, children go missing in the hands of adults and human trafficking becomes evident because of the detriment caused by culture.

According to a US Department of State report published in June 2013, 'South Africa is a source, transit, and destination country for men, women, and children subjected to forced labour and sex trafficking. South Africans and foreign nationals are subjected to human trafficking within the country. Children are trafficked mainly within the country, from poor rural areas to urban centres, such as Johannesburg, Cape Town, Durban, and Bloemfontein. Girls are subjected to sex trafficking and domestic servitude; boys are forced to work in street vending, food services, begging, criminal activities, and agriculture. Nigerian syndicates dominate the commercial sex trade in Hillbrow and other areas, though local criminal rings and street gangs also organise child prostitution; Russian and Bulgarian crime syndicates operate in the Cape Town sex trade.

Chinese nationals coordinate the sex trafficking of Asian nationals. Traffickers control victims through intimidation and threats, including witchcraft, use of force, withholding of passports, debt bondage, and enforced use of drugs and alcohol. Women and girls from China, Taiwan, Thailand, Cambodia, India, Russia, Ukraine, Moldova, Bulgaria, Brazil, the Democratic Republic of Congo, the Republic of Congo, Rwanda, Mozambique, Lesotho, Swaziland, and Zimbabwe are reported to have been transported to South Africa for enforced prostitution, domestic servitude, or forced labour or taken onward to Europe for enforced prostitution' (US Department of State Report 2008).

"If our learners were exposed to jungle gyms, they would gain muscle capacity through body manoeuvre in the most proactive ways, to coordinate their movements smoothly and of course are learning to balance effectively. Our learners are not exposed to this benefit. Getting more swings could be beneficial. Swinging helps develop gross motor skills - pumping legs, running, jumping. Swinging helps develop fine motor skills - grip strength, hand, arm and finger coordination. Swinging develops learners' core muscles and helps with the development of balance. How are our learners going to develop such skills if there are not enough swings"? (P3)

ECD practitioners understand the importance of outdoor instructional material as a learning tool in nurturing the physical well-being of four-year-old learners. Outdoor learning material comprises instructional, and educational material which is mainly located and utilised outside the classroom. Examples of outdoor instructional material include but are not limited to sandpits, tyres, balls, swings, and ropes (Kenya Institute of Education (K.I.E.), 2008). Outdoor play is not only emphasised by ECD practitioners. Learners themselves prioritise it. Outdoor play is "demonstrated as being at the top of children's own agenda" (Kernan & Devine, 2010, p. 372).

This study points out that there is scarcity of outdoor learning material in the ECD centre concerned.

"This makes it difficult for us to offer suitable and excellent ECD services at the Centre". (P3)

Although the government has made worthy advancements in formulating comprehensive ECD policies, the quality of amenities remains poor due to a lack of resources and deprived infrastructure.

#### 6.2.5.3 Poor Management of the ECD Programme

Quality is crucial. The education system requires quality teachers or practitioners to provide a quality curriculum (Excell & Linington, 2011). In that way, learners will respond positively to the offering they receive from a quality macrosystem. This will make learners arriving in Grade R have the desired level of school readiness. To understand what quality in early learning may mean, it is first critical to understand how young children learn. This is especially true for Grade R, where curriculum and pedagogy are closely related and what children learn is as important as how children learn (Excell, 2011).

There is a strong argument that Grade R, for which four-year-old learners are getting prepared, is expected to be properly aligned with ECD pedagogical practice, and not be seen as a miniature or diluted Grade 1 (Excell & Linington, 2011).

"I took up this job because I had no other job to do. It was not a difficult job because I love children. The Centre started sending us for basic training in ECD. This became an eye-opener, and we gained an understanding of what and how to teach young children". (P1)

"Education authorities need to ensure that we are competent in what we do". (P2)

"We need to follow the same curriculum as those in ECD centres in big cities. I hope what we are teaching our learners here is not different". (P3)

Baloyi and Makhubele (2018, p.10778) state that "with the current mushrooming of ECD programmes, particularly in rural areas, the issue of competency is neglected by both authorities and ECD practitioners." Poor qualifications and working conditions among ECD practitioners contribute to the poor quality of ECD programmes and outcomes. The inadequate training of ECD practitioners weakens their provision.

The administrators of an ECD centre are accountable for the functionality of the ECD programme. They are an exosystem because they represent a formal structure that does not contain the child but indirectly influences them as they affect one of the microsystems. The South African Early Childhood Review 2019, an annual measure of progress in early childhood development (ECD) service delivery, has found that more than one million 3- to 5-year-olds are excluded from ECD programmes across the country.

South African children living in poverty were also far less likely to attend a preschool than their wealthier peers, with these children likely to start school at a distinct disadvantage, which carried lifelong consequences. In his 2019 State of the Nation address, President Mr Cyril Ramaphosa announced that the responsibility for the management of ECD programmes would shift from the Department of Social Development to the Department of Basic Education. An additional year of preschool (Grade RR) would also be made compulsory for all children.

Gail Washkansky (2014) in her article *State robs children of best chance* reflected that "there is no well-directed political will. The delay of the government departments responsible for ECD in acknowledging the shortcomings of the current system and their failure to take action is committing yet another cohort of young people to a life of frustrated attempts at learning". This study indicates that provision of ECE has the ability to eradicate the injustices of the past by empowering communities, reducing inequalities, and breaking away from intergenerational poverty.

# 6.2.5.4 Class Size

Ayeni and Olowe (2016, p. 65) define class size as "the number of students in a given course or classroom, specifically either the number of students being taught by individual teachers in a course or classroom, or the average number of students being taught by teachers in a school or educational system". According to the South African Minister of Basic Education, Angie Motshekga (2012), the learner-teacher ratio should be at 30.4:1.

Table 6.3 below presents the reflection of answers which were given by ECD practitioners when they were asked how many learners, they each have in class:

# **TABLE 6.3:** A table of number of learners in each classroom

#### **SOURCE:** Author

ECD PRACTITIONER	NUMBER OF LEARNERS IN THE CLASSROOM
P1	56
P2	49
P3	47

As illustrated in the Table 6.3 above, P1, P2 and P3 had 56, 49 and 47 learners, respectively. Maxwell (2016) highlights the importance of educational settings, putting more emphasis on the learner-to-teacher ratio and the existing space for occupation within the school setting.

According to my observation, large classes proved to be noisy. This impacted negatively on classroom discipline. This is posited by Zenda (2019, p.1) who states that "large class sizes affect the implementation of practical activities and discipline may be adversely affected". These large classes presented more challenges for ECD practitioners in terms of classroom management and pupil control. This was evidenced by a group of boys who were throwing paper at each other during lesson time. It was not easy for the practitioner to spot the problem and deal with it timeously. I also observed that classrooms were full of wastepaper on the floor, and this was very uninviting.

"We are the only ECD centre in this neighbourhood. All children come to this centre. We cannot turn them away because there is no alternative. This makes our classes extremely big, and we cannot give individual attention to each and every learner. This situation weakens our offering. Both learners and practitioners do suffer. If more practitioners could be employed, things may change for the better". (P1)

"If I had a smaller class, it would improve the environment and increase the effectiveness of my offering. I would easily interact with every learner and identify those who need more interaction time. This would make me understand each learner's needs and come up with strategies to assist those who fall behind". (P2)

With 47 pre-Grade *R* learners in my class, it is difficult to give all of them the attention they need. These learners are young. They demand attention". (P3)

Khan and Igbal (2016, p.10164) argue that overcrowding would result in discipline, instructional and assessment problems. Marais (2016, p. 2) argues that such large classes lack discipline since they are difficult to manage. It is difficult for ECD practitioners to engage each learner in a large class. It is difficult even to conduct group work activities. Such a microsystem is not conducive to teaching and learning. Kohler (2020, p.2) states that "reduction of class sizes is often argued to be one of the most simple and effective ways to improve learner outcomes". This study hypothesises that class size matters in terms of the physical well-being of four-year-old learners.

#### **6.3 CHAPTER SUMMARY**

The Ecological Systems Theory of Bronfenbrenner (1979) provided a useful ontological foundation for the study. Instead of using the theories to directly guide the analysis process, the different systems provided an interesting frame to analyse the physical well-being of four-year-old learners in relation to their readiness for Grade R. This chapter described the key findings of this research study. I regard my research findings as trustworthy as I followed the recommended steps of analysing qualitative data.

#### **CHAPTER SEVEN**

#### DISCUSSION OF FINDINGS AND THEORISING

#### 7.1 INTRODUCTION

The previous chapter presented research findings and analysis. The analysis was informed by the data that emanated from the semi-structured interviews, participant observations and literature review which were used as data generation methods. This research study was concerned with exploring the physical well-being of four-year-old learners in relation to their readiness for Grade R. I was particularly interested in their level of independence when carrying out certain physical activities. I also aimed at critically analysing the issues which enabled or constrained their physical well-being as well as ECD practitioners' level of readiness to plan for indoor and outdoor physical activities. This chapter aims at discussing research findings and connecting them through the layers of detail to the overarching research questions they relate to. The theoretical framework for this study (as presented in Chapter 4 and as well as throughout this study), will guide the discussion.

#### 7.2 DISCUSSION OF FINDINGS / SYNTHESISING THE FINDINGS

The discussion presented hereto emanates from research findings that were presented in the previous chapter. The findings are embedded in Bronfenbrenner's ecological systems theory which states that to explore learners' development, it is essential to look not only at learners and their immediate environment. The larger environment has a role to play as well. The following section discusses each research finding with subheadings under each theme.

# 7.2.1 Developmental Delay in the Physical Well-being for Grade R Readiness 7.2.1.1 Physical Well-being: A Cognitive Action

As stated in Chapter 6, this study established that four-year-old learners exhibited insufficient self-care skills as far as toileting, washing of hands, and putting shoes on and off are concerned. Toileting is a multi-step process that needs to be carried out carefully and sequentially without any disturbances and hindrances. Learners are expected to remember the consecutive steps of undressing, sitting, going, wiping, dressing, flushing, dressing-up and washing of hands. It is essential learners are attentive to the process that they are engaging in. For example, wiping

should be done from front to back, not the other way round. Physical well-being is, therefore, more than a motor skill. It is a mental process. Neuroscience research has produced significant evidence that movement and cognition are favourably linked (Castelli et al.; Mandolesi et al., 2018). Moreover, four-year-old learners in this study found it too stressful to use toilets at the ECD Centre as there were only two modern, flushable toilets. The rest were pit toilets and posed a challenge to learners as they were hazardous particularly because of their age. Although toilets were child-sized, some shorter learners needed a secure step stool so that they could climb onto and off the toilet and prevent their feet from dangling while toileting.

#### 7.2.1.2 Colloquialism in Child Development

This study established that in toileting, besides the act itself, insufficient cooperation between the ECD Centre and the home environment was evident when some learners used unacceptable language in a school environment saying "ngifuna ukubhosha" instead of polite language "ngicela ukuzikhulula"[May I please go to the toilet] as encouraged by the ECD Centre. The use of colloquial language in four-year-old learners is a result of minimal cooperation between microsystems. With the mesosystem emphasising interactions between learners' microsystems, such as the interactions between learners' parents and the ECD Centre, this was minimal. There was hardly any communication between learners' parents and the ECD Centre. There is a lack of collaboration between the two microsystems. This non-interaction had a negative influence on the learners' development. The mesosystem as a system of microsystems seemed to be crumbling. As the ecological systems theory propositions, had things been different, a good relationship between learners' parents and ECD practitioners would have had positive effects on the learners' development. This study recognises that their language comes from their caregivers.

This section recapitulates that physical well-being is a cognitive action that four-year-old learners found to be stressful in terms of toileting, washing of hands and putting shoes on and off. In this study, colloquialism among four-year-old learners surfaced as a result of insufficient cooperation between the microsystems of the ECD Centre and the home environment.

# 7.2.2 Causes of Developmental Delay in Physical Well-being for Grade R Readiness7.2.2.1 Insufficient Parental Involvement

Parents are anticipatedly responsible for every detail of their children's lives, from toilet training to dressing up correctly. When children finally go to a learning environment, most parents breathe a sigh of relief. They feel they can hand off some of that pressure to someone else, knowing that a qualified professional will make sure their child receives the education they need. However, this study sees parents and ECD practitioners having to share the responsibility to assist four-year-old learners to meet their educational goal of being physically ready to perform Grade R activities. While ECD practitioners can advise parents on some issues, parents also have important information about their children that ECD practitioners might not know. Both can bring perspectives to the table that enrich the learning experience. This study established that there are socio-economic factors that contribute to insufficient parental involvement in the education of four-year-old learners. These factors are as follows:

#### a) Mothers as Dominant Parents

This study found that it has become a common situation for mothers to take a dominant parental role in the absence of fathers. According to the General House Survey (2020), in South Africa 41.7% of children live with mothers only while KwaZulu-Natal exceeds the country's percentage by 7.9%. This is mainly due to socio-economic factors, especially in rural settings like Mandlankala area where it is financially beneficial for fathers to work away from home. The trend in apartheid South Africa was for men to migrate to places of employment and send money home (Bennett et al., 2014; Posel, 2010). According to research conducted by the Human Sciences Research Council (HSRC) and the South African Race Relations Institute (SARR*I*), 60% of SA children have absent fathers, and more than 40% of South African mothers are single parents. This negatively impacts the level of parental involvement in the education of their children. It poses a challenge to how parents who are already juggling so many responsibilities find the time to invest in their children's education.

#### **b)** Absent Fathers

This study found that a considerable number of four-year-old learners in the ECD Centre live in homes without fathers. This is a norm in South Africa as 29% of children live without an adult male. According to the General Household Survey (2016), about 36% live at home with their biological father and 35% reside with a man who is not their biological father. The absence

of fathers is caused, variously, by labour migration, violence, abandonment, AIDS, violent and accident-related paternal deaths, poverty and unemployment (Hosegood & Madhavan, 2010). It is popularly asserted that there is a strong link between the absence of fathers and lack of support for children. Remote parenting negatively impacts child development as fathers have a role to play in the life of their children. With the rising cost of living and education, being solely responsible for all the costs required to care for a child is no doubt a significant weight on the shoulders of a single parent.

#### c) Grandparents assuming a parental role

As stated in Chapter 5, grandparents, especially grandmothers are a component of caregivers who have the most direct and lasting impact on children's learning as they assume parental duties. This study establishes that child-rearing in South Africa has long been characterised by the presence of multiple caregivers and the involvement of broad kinship networks in the lives of children, both with and without living parents. With the importance of the role that the extended family plays in African culture, it is not surprising that grandparents are the single most important category of caregivers, besides the actual biological parents of a child, to assume responsibility for caring for and raising children in South Africa.

Due to the socio-political context in South Africa, some parents may work long hours and sometimes live away from their children. Many parents are supported by grandparents, who assume the role of either temporary or sometimes primary caregivers of their grandchildren. They also hold a unique place within South African society and often function as a family's primary source of income due to the Older Persons Grant. This grant is also known as the state old-age pension which is a monthly income for citizens, permanent residents, and refugees 60 years or older with no other means of financial income. This grant is meant to help our older residents cope financially during their old age. The Constitution of the Republic of South Africa (Act No. 108 of 1996) states that all citizens have the right to appropriate social assistance from the government. Older persons are a vulnerable population and recent research calls for pension programmes to be strengthened to combat poverty among the elderly population (Zimmer & Das, 2014). Yet this study learnt that in rural Mandlankala older persons find themselves in a compromising position of taking care of the family. According to Sampson and Hertlein (2015) as well as Montoro-Rodriguez and Hayslip (2019), *families* which are headed by a grandparent often are called "*grandfamilies*," and they are common among families in which a relative has

taken over primary responsibility for raising a child from parents (known as "kinship care"). From semi-structured interviews with ECD practitioners, this study established that there was minimal effort, if any, on the part of parents in enforcing self-care skills including toileting, washing hands and putting shoes on and off. These skills are expected to be first taught at home by parents and caregivers. ECD practitioners take over from the home microsystem.

Parental involvement also pertains to their contribution when children are doing physical activities. As much as it is desirable to have them involved, they need to know when to let go. According to a study conducted by Obradović, Sulik, and Shaffer (2021), preschool learners whose parents get enthusiastically engaged in their children's physical activities, be it play, packing up toys, or giving suggestions or corrections, displayed more difficulty in controlling their behaviour and emotions at other times. They also showed signs of impatience as they did not respond well to activities tested. "Parents have been conditioned to find ways to involve themselves, even when kids are on task and actively playing or doing what they have been asked to do" (Obradović, 2021, p.1). This study further states that "But too much direct engagement can come at a cost to kids' abilities to control their own attention, behaviour and emotions. When parents let kids take the lead in their interactions, children practice self-regulation skills and build independence".

Although some grandparents assume a parental role, they are not strong enough as "this fulltime responsibility for their grandchildren has proven to be strenuous to the elderly care-givers" (Mokone, 2006, p.187).

#### d) Child-Headed Homes

The findings of this study revealed that in Mandlankala area there are households that are childheaded. In 2015, Stats SA's General Household Survey showed that there are about 90 000 children in 50 000 child-headed households. While this figure is not large in relation to the total number of children in the country, this is still a cause for concern. Child-headed households are at risk of having to cope without parental care or regular income and are located in areas where services are poor. In addition, this vulnerable group has to deal with emotional strain and is more likely to be abused and exploited. The Department of Social Development is the process of compiling a Child-and Youth-Headed Household Register to formalise assistance for child-headed households. The Department of Social Development began this campaign in 2014 when it asked South Africans to assist in ensuring that currently existing and new child- and youth-headed households receive the necessary support from the government by informing the Department where they are. To date, 3 214 child-headed households and 6 522 youth-headed households have been identified and assisted by this DSD programme in South Africa. Once identified, an assessment of the needs of the child- and youth-headed households is done and thereafter the affected children are linked to the necessary therapeutic interventions and resources.

The Select Committee on Social Services welcomed this announcement and called for its urgent roll-out so as to ensure support is given to the necessary households. Further, the Committee applauded all civic organisations for their work in this area and condemned any corruption in relation to these initiatives.

The legislative mechanisms and policies in place to protect these children already include the child-support grant, no-fee schools, the provision of meals at school, and the strengthening of the National Register for Sex Offenders.

#### 7.2.2.2 The Interactional Nature of Systemic Poverty and Physical Readiness

The findings of this study revealed that poverty is rife in Mandlankala and this has serious implications for the provision of quality early childhood education. The ECD Centre in this study faces severe challenges that are unique to its environment. Insufficient parental interest in children's education, inadequate funding from the state, a lack of resources, and underqualified ECD practitioners are some of the barriers to effective teaching and learning. These challenges can be attributed to numerous sources, from within school structures and from the external environment, including local communities and education authorities. The Constitution of the Republic of South Africa, 1996 (Republic of South Africa, 1996a), the South African Schools Act (Republic of South Africa, 1996b), and related regulations and policies on equity indicate that every South African learner should have access to learning and teaching, similar facilities, and equal educational opportunities. This is sadly not the case. Poverty and unemployment that result in the problems mentioned above, directly influence the roles of teachers and the quality of education available to learners in these circumstances.

This study is of the view that ECD requires significant investment because any country can reap huge social and economic benefits from such investment in education. Development in a country is determined by the level and growth of its human resources to which investments in education contribute greatly (Brown & Swanson, 2003). It is thus important that all learners, in rural or urban settings, benefit from quality basic education to promote accelerated development in rural South Africa. Education must be at the forefront of rural development "to curb the pervasiveness of extreme poverty and malnutrition in rural areas, break the poverty-induced cycle of rural life, and build the human capacity needed for rural development" (Lewin, 2004, p.56).

Parents, caregivers and ECD practitioners can help develop a child's motor skills at all ages, starting by recognising its general sequence. It starts from the head, neck, arms and legs, and then moves to the hands, feet, fingers and toes. However, it is important to remember that each child develops differently. Here are ideas to encourage motor development at different ages. Many physical development activities for four-year-old learners should be encouraged both in class and outdoors. In class, learners should be given crayons, markers and a variety of play materials to enhance their fine motor skills. It is also important to do arts and craft projects using playdough, scissors and small beads on a string.

In the microsystem, this study explored interaction or lack thereof between four-year-old learners and their parents, siblings, school peers and ECD practitioners. The examples of the exosystem in this study are the Mandlankala area neighbourhood and learners' parents' workplaces. Both these environments have no direct engagement with the four-year-old learner but the interactional poverty that is evident in the area and the distance between the learners' homes and their parents' workplaces pose a threat to the development of four-year-old learners who are being prepared for Grade R. As stated by the macrosystem, the socioeconomic status, poverty, and ethnicity proved to be a negative factor on the physical development of four-year-old learners. Moreover, the culture that individuals are immersed within has had a negative influence on the beliefs and perceptions of parents on their involvement in the development of their children.

Mandlankala area is geographically located in a rural area. The key problems that have been identified by the literature review in many rural areas are poverty and lack of facilities. In South

Africa, the majority of people who are poverty-stricken are blacks who live in rural areas. This is revealed by the 2017/2018 report compiled by the South African Human Rights Commission (SAHRC) which states that 64% of blacks, 41% of coloureds, 6% of Indians and 1% of whites are living in poverty in South Africa. Since the dawn of freedom in 1994, the government has been trying to challenge the status quo. However, issues of corruption in leadership and the scarcity of job opportunities have threatened the much-desired process of getting people out of poverty. This is confirmed by the 2017 Transparency International Corruption Perceptions Index which allocated South Africa a score of 43 out of 100, ranking South Africa 71 out of 180 countries ("South Africa". Transparency International). In 2020, a bit of improvement was evident when South Africa received a score of 44, ranking it 69 out of 180 countries ("South Africa". Transparency International). In 2016, South Africa had received a score of 45. Countries with scores below 50 are believed to have serious corruption problems ("South Africa". Transparency International).

The chronosystem comprises all of the environmental changes that occur over the lifetime which influence development, including major life transitions death of parents because of HIV and more recently COVID-19 deaths. This study saw the prevalence of child-headed households due to an alarming number of deaths of parents from the early 2000s and deaths of older family members due to COVID-19 more recently. There has also been an alarming change in the landscape of education since the prevalence of COVID-19 in South Africa. Learners have had to attend school on a rotational system basis. This turn-taking system appeared to be excellent at the time, but it quickly became not ideal. Moreover, during this rotation, inequalities in the education system were so conspicuous. Middle to upper-middle class schools, mostly private, were actually allowing learners to attend full-time, while lower-class schools have had to deal with the problem of overcrowding and not being able to return full-time.

Poor toilet facilities at the ECD centre do not promote the physical well-being of learners. Learners do not get to practice the physical skill of using toilets because of their hazardous nature. Although there were newly built modern, flushable toilets, I observed that there were still pit toilets. Poor water, sanitation and hygiene conditions constitute a high-risk environment for learners and could be a health hazard. In terms of putting shoes on and off, learning the concept of left and right was still a challenge to most four-year-old learners. This concept was foreign to them as they could not confidently recognise which shoe goes on which foot. ECD
practitioners used clothing pegs to peg the shoes together such that the left shoe is on the left and the right is on the right. Overcrowded classrooms do not promote physical well-being. This study saw cases of ECD practitioner: learner ratios exceeding the stipulated ratio of learner teacher which should be at 1:30.4. P1, P2 and P3 had 56, 49 and 47 learners, respectively. The level of noise in classes was high. Some learners were also throwing papers at each other during lesson time thus impacting negatively classroom discipline by perpetuating disruptive behaviour. ECD practitioners lose valuable lesson time in trying to control learners. Little time is left for actual teaching. In overcrowded classrooms, it proved to be difficult for ECD practitioners to give attention to individual learners and motivate them to participate in physical activities. Such classrooms tend to be practitioner-centred, and learning becomes passive. Moreover, such classrooms are unhealthy. Khumalo and Mji (2014) are of the view that overcrowded classrooms are unaccommodating learning settings and may even affect the learners' physical health. They point out that these classrooms are unhygienic, because if one learner has a transmittable infection, then others can be easily infected.

This section recapitulates that insufficient parental involvement is a result of mothers being dominant parents, absent fathers, grandparents assuming a parental role, child-headed homes, and the interactional nature of systematic poverty.

## 7.2.3 Impact on the Learner

This study established that although ECD practitioners did not have any formal training, they had a clear idea of what physical well-being is. This had a positive impact on the learners. I observed that there was a lot of running when four-year-old learners were outdoors. This study posits that running is one of the simplest and most basic ways the human body is built to do. Other than enhancing motor skills, running has several health benefits. It increases cardiorespiratory strength and endurance (Hottenrott, Ludyga, & Schulze 2012). ECD practitioners seemed to be aware of these benefits.

During running activities, ECD practitioners did not lay emphasis on competing or covering specific distances. They made participation fun. However, I noticed some competitiveness amongst learners which was healthy for them to set and attain their own personal goals. Running

does have health benefits for children. Besides building stamina, strength, and self-esteem, running also supports children in managing chronic conditions, such as depression, ADHD, obesity, and diabetes (Zschucke, Gaudlitz, & Ströhle, 2013). When one is running, oxygenated blood oozes to different parts of the body. This positively influences blood pressure and circulation and significantly reduces your risk of contracting cardiovascular disease. Running also decreases the risk of death from any cause by about 27% (Pedisic et al., 2020). I also observed that running activities were conducted outside in the sun. While any running offers the above-mentioned benefits, running outside might offer even more (Manferdelli, La Torre, & Codella 2019). Fresh air is good for the lungs, brain, and emotional state. Moreover, vitamin D boost from the sun benefits the immune system, eye health, and bone health. It is produced in the body when ultraviolet B (UVB) rays from sunlight hit the skin. This is confirmed by Neo-life Africa (2021, p.1) which states that this vitamin is "produced endogenously when ultraviolet (UV) rays from sunlight strike the skin and trigger vitamin D synthesis".

Instead of heading out to the track to run laps, ECD practitioners made the running interesting. Although in Chapter 5 it was stated that some learners who were delayed preschool entry and were older than four years displayed low self-esteem, the positive impact of physical activities on learners was evident when practitioners were engaging in the following variations of running:

## 7.2.3.1 Red Light, Green Light (Kuluhlaza, Kubomvu)

I observed ECD practitioners making learners line up at the starting point. Once the practitioner calls out "*kuluhlaza*" [green light] everyone started running as fast as they could towards the finish line. When the practitioner calls out "*kubomvu*" [red light] all the runners had to freeze in place. Learners started running when the practitioner calls out "*kuluhlaza*" again. When the practitioner called out "*kuphuzi*" [amber light] the learners must slow their pace until it was time to freeze or run fast again. The running game is great for interval training as well as building physical endurance and listening skills. Running is a high-impact, weight-bearing activity, which means that the rhythmic pounding of the ground stresses bones in a way that can be very healthy. Bones respond to the stress by getting stronger in order to handle the recurring impact. This is a profound benefit for the lower body. Still, running can help improve bone density, which is of great benefit as we age (Lee, 2019).

#### 7.2.3.2 Ngaphuma la? Izinsimbi. Ngaphuma la? Amaketango (Chains and Irons)

This study established that ECD practitioners displayed a clear understanding of physical wellbeing by employing physical activities which are embedded in classroom routines. These activities were not stand-alone. During circle time, ECD practitioners instructed learners to play games like 'Ngaphuma la? Izinsimbi. Ngaphuma la? Amaketango'. These games can be played indoors or outdoors. Furniture was adjusted for more space. During and after story time, ECD practitioners encouraged learners to role-play parts of a story and pretend to be story characters and imitate their movements and sounds. During snack or lunch time, they encouraged learners to use utensils and clean up after themselves. During the transition time, they instructed learners to walk sideways or hop to where they needed to be. ECD practitioners involved learners in activities that allowed them to have control of each body part, encouraging them to use both sides of the body. They were creative in their offering, using freely available material for obstacle activities by using planks of wood as balance beams, boxes to climb into and to crawl through as tunnels, old car tyres to jump into and climb over, and a ladder laid down on the ground to hop into. ECD practitioners walked around to monitor and supervise learners' participation levels. This assisted in making sure that learners were fully involved despite large class sizes. In this way, learners' fine and gross motor skills were honed. These fun and participative physical activities were carried out throughout the day in both a structured and unstructured manner.

#### 7.2.3.3 Oshaka nofishi (Sharks and Minnows)

One learner was designated as a shark and others stood in the centre of the play area. All the other learners were the fish and lined up, side-by-side at one end of the area. All the fish would call out in unison, *"Shaka, shaka, sicela ukuwela ulwandle."* When the shark responds, *"Wozani bo, wozani,"* every learner runs for the far side of the play area, trying to avoid being "eaten" (tagged) by the shark. If a runner is tagged, he or she then becomes a second shark and works with the first to tag other fish. The round or game is over when there is only one minnow left. Studies have shown numerous connections between running and improved mental health and mood which is important for school readiness (Oswald et al., 2020; Markotić et al., 2020).

#### 7.2.3.4 Wacky Laps

In this study, there were times when ECD practitioners wanted to make lap running interesting. To make running laps more fun for learners, ECD practitioners introduced Wacky Laps, in which they run every lap in a different way. For example, learners ran the first lap backwards, and the second lap as slowly as possible. They can run a lap weaving among cones, another while holding hands with a partner, and another jumping over sandbags. Studies suggest that if a child runs, he/she experiences fewer sleep disturbances and less daytime sleepiness than nonrunners. Children need to run moderately since running at moderate intensity may be better for improving sleep quality than running vigorously (Martin et al., 2018; Wang & Boros. 2021).

# 7.2.3.5 Relay Race

The ECD practitioners used relay races as another great way to blend running practice with interval training and teamwork. For this whole-group relay, they divided learners into four groups and lined up each group in the four corners of the play area. In such a race, four-year-old learners worked as a team to reach the finish line. The aim was to reach the end as quickly as possible, and each member of the team took a turn completing part of the race. Normally, the relay race baton is a smooth, hollow, one-piece tube made of wood, metal, or any other rigid material. In this study, batons were made of foam. I observed a lot of physical movement and technique during the handover of batons. As learners handed over batons, ECD practitioners taught learners to maintain a certain length between them. They were taught not to snatch but grip as soon as they felt the baton in their hands and hold the baton at one end, so there is enough room for a teammate's hand at the other end. However, it was a challenge for four-year-old learners to keep their eyes ahead and not turn around.

This section recapitulates that although ECD practitioners who are participants in this study did not have any formal training, they involved learners in positive physical activities which challenged their fine and gross motor skills. The practitioners understood the importance of outdoor play in terms of Vitamin D. To have their physical well-being enhanced, four-year-old learners need to have healthy bones, teeth and muscles. Vitamin D deficiency can cause bones to become soft and weak, which can lead to bone deformities as "low vitamin D levels are associated with greater illness severity, morbidity and mortality in both adult and paediatric in Intensive Care Unit (ICU)" (Amrein et al., 2020). ECD practitioners understood the importance of fresh air for lungs, brain and emotional state of learners.

## 7.2.4. Engagement of ECD Practitioners

# 7.2.4.1 Practitioner Continuous Professional Development

As stated in Chapter 5, ECD practitioners are of the view that this has to be an ongoing process mainly because they do not have the professional qualifications to do the job. They see this as

a career-long process that could make them stay relevant in the field. It will assist them to provide high-quality services to four-year-old learners and their families. This would serve as a continuum of learning and support activities designed to prepare individuals for work with and on behalf of young learners and their families, as well as ongoing experiences to enhance this work. During ECD professional development sessions, practitioners find themselves being in a community of like-minded people and being able to share stories and ideas. It also helps them, especially novice practitioners, keep in check what is happening in ECD classrooms and playgrounds. As stated in Chapter 6, ECD practitioners are poorly remunerated which makes them feel less appreciated. Getting their skills developed from time to time makes them feel that they are doing important work.

This study sees professional development as extended opportunities that "lead to improvements in the knowledge, skills, practices, and dispositions of early education professionals. Professional development encompasses education, training, and technical assistance" (National Association for the Education of Young Children, National Association of Child Care Resource & Referral Agencies, 2011, p.5).

# 7.2.4.2 ECD Centre Upgrades

The need to keep learners in a pleasant and inviting environment so that they can get their physical well-being enhanced cannot be overemphasised. Their safety and comfortability depend on the state of the ECD Centre. ECD practitioners had every right to be concerned about the state of the ECD Centre. Besides the hazard that was posed by pit toilets, there was a foul smell coming from the area and a high presence of flies. There was also poor ventilation and insufficient light to enter the toilet facilities. The atmosphere was unpleasant, and this was a health hazard to four-yea-old learners. Lee and Tham (2021, p.1) state that "due to insufficient ventilation, public toilets can become sites for cross-infection".

## 7.2.4.3 Education Equipment Provision

Educational equipment is a vital component in offering a quality early learning environment to young children. By working with educational equipment children acquire essential developmental skills, such as fine and gross motor skills, observational skills, hand-eye coordination, problem-solving skills, as well as the recognition of colours and shapes. The equipment also assists children in developing their life skills, numeracy and literacy skills, especially their vocabulary. This equipment provides opportunities for play which serves as a

means for the growth of children's physical, social, cognitive, emotional, social and moral development. This is congruent with what is stated in Chapter 1 where it is posited that ECD brings together all aspects of social, emotional, physical and cognitive development from conception until the age of 9, (Department of Education, 2001).

To enhance physical well-being, I observed that the ECD Centre was equipped with learning material that arouses vital growth skills like fine and gross motor skills. Four-year-old learners used toys that assist them in developing muscles in the hands and fingers. These muscles are utilised for holding objects. While using these toys, learners were having fun, not knowing that they were doing something beneficial for themselves. The toys which were used to enhance fine motor skills were blunt-ended scissors, playdough, building blocks, puzzles, balls, bean bags, games, blocks, laces, beads, etc. A doctor's kit was used as role-play equipment which made learners imitate actions of adults. One learner would be a patient, another would be a nurse and others would be patients. While the use of the kit aided the 'doctor' in developing fine motor skills, the roleplay assisted learners' language, social and emotional development.

Although learning equipment was fun, durable and safe to use, class size posed a challenge as some learners did not get a chance to engage with the equipment. Creativity from learners did not go unnoticed. A tablecloth thrown over a practitioner's table became a secret house. Playdough was used to make *amagwinya* that one was asked to "taste". The four-year old learners could fantasise. For them, the world becomes a fairylike place without limits. When they are in their fantasy world, they want to pull adults into it and expect them to play along. This study assumes that it is also during this time that imaginary friends may come along.

I observed that in four-year-old learners, play itself became more physical. A simple walk would turn into a jump, a hop, or a skip. Moreover, there was development of arts and craft, and peer relationships took a more serious shape as I saw girls attempting to plait each other's hair during lunch breaks.

## 7.2.4.4 Family Outreach Programmes

The involvement of families cannot be overemphasised as research indicates that parental involvement in children's programmes is critical to the educational success of children (Turnbull et al., 2019). Therefore, parents as primary caregivers of their children, need to be involved as much as possible in the functioning of the ECD Centre. Moreover, ECD services

are part of the community and there is a need for a good relationship between the Centre and families; there is a need for learners with appropriate developmental opportunities and effective programmes to help them to develop their full potential. This assists in constructively caring for learners, which gives them support and security and ensures the development of positive social behaviour.

# 7.2.4.5 Sharing of Knowledge

Chapter 5 presented sharing of knowledge between ECD practitioners and other personnel who are in the ECD fraternity. In this chapter, I present the importance of having more information on the learners as they are getting to enter a formal learning environment in Grade R. The ECD practitioners need to have a better understanding of learners' level readiness for Grade R. To achieve this, practitioners and parents, including caregivers, need to share information about learners. This will inform efforts for ECD practitioners to individualise instruction to suit the needs of each learner. However, class size poses a challenge to the individualisation of instruction and provision of learning activities that suit the needs of each learner. This factor also limits interaction between each learner and a practitioner. This situation opposes theory, such as Vygotsky's sociocultural theory, which posits that children learn through interactions when the adults in their life are able to carefully assess their current abilities and provide scaffolding to further their learning, provides some understanding of why information about children at the start of school having more can lead to positive results (Vygotsky, 1978). Moreover, having enough information could allow ECD practitioners to adjust their curriculum and activities to better prepare learners for the academic and social expectations of formal schooling.

This section mirrors the importance of creating a positive setting for four-year-old learners to have their physical well-being enhanced for Grade R readiness. This can be done through the continuous professional development of practitioners, ECD centre upgrades, education equipment provision, family outreach programmes and sharing of information.

## 7.2.5 Concerns of ECD practitioners

# 7.2.5.1 Restlessness of Learners

For children to be successful, they need consistent, quality rest. Insufficient sleep is related to physical and mental problems that can affect well-being (Becker, Langberg, & Byars, 2015).

Sleeping helps them learn better and stay healthy. Children benefit greatly when they get enough rest, but they also suffer when they do not get an adequate amount. It is the parents' responsibility to ensure that their children get enough rest. One reason sleep is crucial for children is that it allows them to learn better. It enhances their overall cognitive development and will help them reach their full academic potential. Studies have shown that students who regularly get enough sleep have better memories than students who do not get enough. When their brains are well-rested, students can solve problems, concentrate better, and learn new information well. Their brains use sleeping hours to sort through the day's information, which allows for long-term retention of the knowledge they have learned. Children are also more motivated, pay better attention, and behave better when they are well-rested and alert.

Sleep at night is essential for children of all ages to learn, but babies, toddlers, and pre-schoolers need additional naps for successful learning and development. Good sleep, including naps, provides many benefits to children's physical health as well. Children who get adequate rest have healthier growth than children who do not. This is because the hormone that helps children grow is secreted most when they are sleeping. Children also produce proteins known as cytokines when they sleep, which helps their bodies fight off infection and illness. This means sleep is essential for a strong immune system. Children who get enough rest are also more likely to have a healthy weight. This is because sleep deprivation impacts the hormone that signals fullness, so children are more likely to overeat when they do not sleep well. Over time, eating this way can cause childhood obesity. Tired children also tend to crave foods that are unhealthy, which contributes to unhealthy weight gain.

# 7.2.5.2 Lack of Resources

## a) Water Crisis

One of the findings that this study presented in Chapter 5 is water scarcity in the Mandlankala area. Schulte (2014, p.1) refers to water scarcity as "the ratio of human water consumption to available water supply in a given area. It is a physical reality that can be measured consistently across regions and over time". South Africa has come up with one of the most advanced examples of legislation globally, the National Water Act. It emphasises that both people and the environment have constitutional rights to water. But achieving this has yet to be realised. In communities like Mandlankala, there is still a scarcity of water. This has a negative bearing on children's acquisition of self-care skills like washing hands and toileting.

Recently, washing hands has been extremely emphasised because of the infectious COVID-19 disease which is caused by the SARS-Cov-2 virus. This self-care skill can keep every person healthy and prevent the spread of respiratory and diarrheal infections from one person to the next. Viruses can spread from other people or surfaces when one touches one's eyes, nose, and mouth with unwashed hands, prepares or eats food and drinks with unwashed hands, touches a contaminated surface or objects, blows one's nose, coughs, or sneezes into hands and then touches other people's hands or common objects.

# b) Outdoor Play

Although outdoor play is important in child development, this study cannot ignore its risk especially if the class size is big as was observed at the ECD Centre. A common definition of risky play is given by Sandseter (2010, p.1) who states that it is "thrilling and exciting forms of physical play that involve uncertainty and a risk of physical injury". Eight categories of risky play have been identified through observations and interviews with children and ECECs (Kleppe, Melhuish, & Sandseter, 2017):

1) *Play with great heights* – danger of injury from falling, such as all forms of climbing, jumping, hanging/dangling, or balancing from heights.

2) *Play with high speed* – uncontrolled speed and pace that can lead to a collision with something (or someone), for instance bicycling at high speeds, sledging (winter), sliding, running (uncontrollably).

3) *Play with dangerous tools* – that can lead to injuries, for instance, axe, saw, knife, hammer, or ropes.

4) *Play near dangerous elements* – where you can fall into or from something, such as water or a fire pit.

5) *Rough-and-tumble play* – where children can harm each other, for instance, wrestling, fighting, fencing with sticks.

6) *Play where children go exploring alone* - for instance without supervision and where there are no fences, such as in the woods.

7) Play with impact - children crashing into something repeatedly just for fun; and

8) *Vicarious play* – children experiencing thrill by watching other children (most often older) engaging in risk.

This section capitulates that rest, sleep, water and outdoor play are basic physiological needs of human nature. Lack thereof has the potential of hindering the growth and development that is needed to achieve the physical well-being of four-year-old learners.

# 7.3 THE KEY FINDING OF THE RESEARCH STUDY: INSUFFICIENT SELF-CARE SKILLS

This study established that the glaring shortfall of four-year-old learners in rural Mandlankala area in relation to physical well-being is their insufficiency in performing self-care skills. Being independent is a healthy component of normal child development. Practicing self-care routines is integral to early learning and growth. It is beneficial to learners as it teaches them to prioritise their physical health, yet these learners could not remember to routinise washing of hands. This left much to be desired about their memory skills. Putting shoes on and off and toileting also posed a serious challenge to these four-year-old learners.

The nature of the environment four-year-old learners found themselves in posed a challenge in acquiring skills of washing hands and toileting since both require an uninterrupted water supply. Hanapi and Ahmad (2016, p.20) state that "the physical environment is also reported to have effects on children's physical activities". Washing of hands has health benefits and should be carried out carefully following steps of wetting, lathering, scrubbing, rinsing and drying. These five steps need to be carried out in the following manner:

Wet hands with clean, running water, turn off the tap, and apply soap.

*Lather* hands by rubbing them together with the soap. Lather the backs hands, between fingers, and under nails.

*Scrub* hands for at least 20 seconds.

*Rinse* hands well under clean, running water.

Dry hands using a clean towel.

# 7.4 CONCEPTUAL MODEL: INTERSECTIONALITY OF THE SYSTEMS OF SELF-CARE

First and foremost, physical well-being is part and parcel of self-care. According to Williams et al. (2010) self-care has a physical component. This component relates to the exercise of physical activities, to movement and to consumption of energy that leads to the overall well-being of a person.

Centrally important for the thesis is the crafting of a conceptual model that relates the objectives of the study to the findings and conceptual issues at stake in self-care skills in Grade R. I have named my model the Intersectionality of the Systems of Self-care. Below is a diagrammatic presentation of the model:

# 7.1 A CONCEPTUAL MODEL: THE INTERSECTIONALITY OF



# THE SYSTEMS OF SELF-CARE

**Figure 7.1:** The intersectionality of the systems of Self-care **Source:** Author

The above model as illustrated in Figure 7.1 was crafted to bring newness to the body of knowledge in terms of physical readiness of four-year-old learners for Grade R. The development of self-care skills begins with the learners himself/herself as a system in his/her immediate environment. The learner performs skills like toileting, washing hands, and putting shoes on and off. As the learner performs these skills, he/she learns to control his/her physical movements and develops physical, cognitive and emotional well-being. Therefore, self-care skills are a steppingstone from which other physical movements develop. The word 'self' in self-care suggests that this is a skill that has to be eventually performed with as much independence as possible. Pesau, Widyorini, and Sumijati (2020, p.43) affirms that self-care is "the achievement of personal independence in the ability to develop themselves".

Performance of self-care skills extends to a peer group immediate system where activities, like putting toys away and cleaning up and taking turns during play enhance play, enhance negotiation skills, respect for others and the environment, patience and the ability to follow instructions and directions. When the learner's immediate system and the peer group's immediate system collaborate, we get a common ground, the middle system, where both fine and gross motor skills are enhanced, and physical well-being is produced.

# 7.5 CHAPTER SUMMARY

Most learners did not seem to have a strong nurturing relationship with their parents as there was insufficient parental involvement in their development. This study saw grandparents assuming a parental role, mothers being dominant parents, most fathers being absent, and some homes being child-headed. This distant and detached parenthood hampered the development of four-year-old learners. Chapter 1 (see 1.4) and Chapter 3 (see 3.8.3) state the importance of families and homes which must be ready to support the development of a child. The use of colloquial language in four-year-old learners was a result of insufficient collaboration between microsystems.

Future research is needed to further explore the conceptual aspects which are mentioned in paragraph 6.4. This could contribute towards conceptualising further a model. Moreover, physical well-being is a cognitive action as learners need to be attentive to the process that they are engaging in. There is still a conspicuous need for continuous practitioner professional development, ECD Centre Upgrades, education equipment provision, family outreach programmes and sharing of knowledge. In the next chapter, I will draw conclusions based on my findings and provide analogous recommendations.

#### **CHAPTER EIGHT**

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### **8.1 INTRODUCTION**

The previous chapter discussed research findings and connected them back through the layers of detail to the overarching research questions. In this study, the predominant research question was "are four-year-old learners physically ready for Grade R activities"? The theoretical framework for this study (as presented in Chapter 3 and as well as throughout this study, guided the previous chapter). This chapter presents methodological and personal-professional reflections on the study. It also gives an overall review of the study as guided by the four objectives.

## 8.2 METHODOLOGICAL REFLECTIONS ON THE STUDY

The overall aim of the study was to explore the physical well-being of four-year-old learners in relation to their readiness for Grade R. The objectives were to:

- i. Observe the nature of practices ECD practitioners employ to enhance the physical well-being of four-year-old learners.
- ii. Determine the extent to which the ECD Centre promotes the physical well-being of four-year-old learners.
- iii. Examine the extent to which ECD practitioners are pedagogically prepared to plan for the physical activities for four-year-old learners.
- iv. Evaluate the extent to which four-year-old learners are ready for the Grade R physical activities.

An exploratory design using qualitative methods was used in the study. As stated in chapter 5, participants were selected from the ECD practitioners working at an ECD centre in Mandlankala area who satisfied two requirements: The first inclusion criterion was that they had to have been teaching in ECD for at least three years. The second inclusion was that eligible participants must have been currently teaching four-year-old learners. Participants, therefore, were recruited using purposive sampling. I conducted and transcribed semi-structured individual interviews with three ECD practitioners. In terms of observations, I chose to take the participant-observer stance by participating in group activities as desired yet maintaining my

main role as a researcher. The group under scrutiny was aware of my observation activities. The transcripts were analysed through a process of thematic analysis that led to categories and themes. The point of entry of data analysis was to become familiar with information from interviews and observations. I immersed myself in the research data by reading through it repeatedly. The intention for going through data repeatedly was to obtain vivid and descriptive information supplied by the study participants. Credibility, transferability, dependability and confirmability, were used as strategies for enhancing the trustworthiness of the data.

# 8.3 PERSONAL-PROFESSIONAL REFLECTIONS ON THE STUDY

This section presents personal and professional reflections which are based on my observations as well as the research findings of the study. I will provide some details by examining the experience and integrating personal and academic contexts.

The ECD practitioners displayed an understanding that four-year-old learners mostly learn through senses like tough, sight and hearing. Singing and dancing formed a huge part of teaching and learning. It was evident that learners preferred playing outdoors to indoors and they enjoyed working in groups. It was noble of ECD practitioners to acknowledge that they are not formally trained for the job they do yet they showed professionalism in the way they conducted themselves. Planning of daily programmes as well as the actual activities and resources which enhance the physical well-being of learners were apparent. Practitioners dealt with different developmental areas by having different learning corners.

In her classroom, P1 had three learning corners, namely, the book corner, art corner and manipulative toys corner. P2 had two learning corners, namely, book corner and book corner. P3 three did not have a learning corner in her classroom. Class size, as well as resources, were limiting factors in creating class corners. For both P1 and P2, the management of learning corners posed a serious challenge as they had to move from one corner to another to supervise learners during different activities. However, the classroom environment was safe as there were no hazardous objects. The favourable learning environment which was created by ECD practitioners made teaching and learning seem easy and allowed learners to be curious and inquisitive. Practitioners asked learners questions and gave them an opportunity to think about answers. They encouraged respect and taught them to allow only one person to talk at a time.

As mentioned in Chapters 5 and 6, ECD practitioners praised learners who behaved well. At the same time, they allowed learners to make mistakes and deal with their mistakes. This allowed emotional growth. Moreover, the ECD Centre embraced religious and cultural differences. The ECD Centre preferred and encouraged learners to have short and combed hair. However, in Mandlankala, most families are members of the Nazareth Baptist Church. In this church, boys and men keep their hair long while this is a nonissue for females. This is a serious issue for male members of the church as they feel that their religion and beliefs are threatened "when they are forced to cut their hair for school and work" (Shange, 2013, p. 159).

## 8.4 RESEARCH QUESTIONS, CONCLUSIONS AND RECOMMENDATIONS

This section presents research findings in relation to research questions and subsequently offers corresponding recommendations.

#### 8.4.1 Research Question 1:

# What is the nature of practices ECD practitioners employ to enhance the physical well-being of four-year-old learners' readiness for Grade R?

This study recommends that ECD practitioners should continue to offer both structured and unstructured physical activities throughout the day in their engagement. While doing this, practitioners need to emphasise on the fact that physical activities should be fun and participative. Physical activities could extend to home environments where parents and caregivers need to engage children in activities such as running, jumping, and dancing to make it habitual and part of family activities. Because they display an understanding of physical wellbeing, ECD practitioners need to provide parents and caregivers with information on the importance of physical activity and the adverse effects of too much sitting time through a variety of formats such as providing them with a leaflet from the ECD Centre or trusted source. Information materials for parents and caregivers need to be in multiple languages and at appropriate reading levels for the target population.

Notably, ECD practitioners need to involve learners in symmetrical, reciprocal and asymmetrical movements. Symmetrical movements are when both hands and/or feet are performing the same motion. Examples include clapping and jumping. Reciprocal movements include when the body differentiates both sides of the body using a rhythmical motion. This

includes walking, riding a bicycle, running, etc. Asymmetrical movements are very similar to reciprocal movements meaning both sides of the body are working together but both sides are performing separate tasks with one side leading and the other side supporting. For example, cutting paper using a pair of scissors and tying shoelaces.

This study endorses effective and practical physical supervision of learners as this practice will continue to inform their strategies and develop their skills to enhance and sustain the physical well-being of learners.

# 8.4.2 Research Question 2:

# How does the ECD Centre promote the physical well-being of four-year-old learners for their readiness for Grade R?

As stated in Chapter 1, well-being speaks to how learners thrive "physically, mentally, emotionally, spiritually, morally and socially" (NCF, 2015, p.78). This study concurs that ECD centres need to promote the physical well-being of four-year-old learners to enhance their readiness for Grade R. However, the findings of this study established that there is a scarcity of water, toilet facilities and outdoor learning material at the ECD Centre which is a hindrance to promoting the physical well-being of four-year-old learners. This kind of material comes in many shapes and sizes thus catering for learners' specific physical needs. This scarcity deprives learners of opportunities to practice new physical skills which could improve their readiness for Grade R. This study recognises two essential reasons why outdoor physical activities are significant for four-year-old learners must achieve, including fine and gross motor development and the grasping of vast amounts of basic knowledge like counting can be most effectively learned through outdoor play. Secondly, our culture is gradually taking outdoor play away from children through disproportionate screen time thus negatively impacting physical well-being.

Contrary to the above, the ECD Centre, to a certain extent does promote the physical well-being of four-year-old learners through practitioners' use of positive words and phrases. This study established that if you want positive behaviour, use positive language. Although ECD practitioners who are participants in the study do not have formal qualifications, they aware of

the results of using positive language. They use words like "*I am proud of you*", You are so good" to encourage the efforts of self-care skills which were displayed by some learners. This study also endorses that what you put in is what you get out. ECD practitioners have a huge influence on learners with their positive words and this yielded positive results as learners engaged in physical activities with more confidence. It also reaffirms the myth that there is no sweeter sound to a person's ears than their own name. Practitioners, therefore, need to continue to use positive words, pairing them with learners' names. For example, "Keep it up Sanele", "You are so strong Lungile".

This study suggests that there should be an improvement in toilet facilities so that learners can practise physical activities of self-care. Four-year-old learners should not go to the toilet unsupervised because of the hazard that is posed by the nature of pit toilets. The government needs to improve infrastructure, sanitation, hygiene and water supply in educational environments by providing more toilets and latrines that flush into a sewer or safe enclosure because "sanitation facilities, especially improved ones, aim at reducing diseases transmission..." (Kumwenda et al., 2017, p.1). This will reduce learner absenteeism from the ECD Centre due to diseases contracted within the environment.

In terms of the concept of left and right when putting shoes on, most four-year-old learners in this study had not mastered this but were assisted by their ability to recognise their names. Over and above the pegging of shoes, ECD practitioners would write learners' names on a piece of adhesive tape and cut it in half. They would place the beginning of the name in the left shoe and ending in the right shoe. For learners to make their names correctly, their shoes would be positioned correctly. For example, if a learner's name is Ngami, the 'Nga' will be stuck on the left shoe and the 'mi' on the right. For learners who cannot read their names yet, this study recommends that ECD practitioners teach learners the concave and convex methods. Most shoes will make a circle or oval in the centre when they are placed correctly and look a bit like a set of wings when they are not. The concept of left and right is as cognitive as much as it is physical. However, most studies dwell on handedness which is a preference for using one hand over another (Bondi et al., 2020) with left-handedness being a minority condition worldwide (Luff, 2014; Alhassan, 2018). This study observed only one left-handed learner and no ambidexterity was observed among learners.

In ECD, class size remains an issue. With help from the government, ECD centres should employ enough practitioners to maintain the accepted 1:30.4 practitioner: learner ratio. This will assist in reaping pedagogical benefits of smaller class sizes because learners will get the attention they need from practitioners and more opportunities to participate in physical activities which enhance their readiness for Grade R. The more learners there are in a classroom, the easier it is for a few distracted kids to derail your lesson. Therefore, ECD practitioners could keep everyone busy to curb disruptive behaviour and keep noise levels down. This can be achieved by performing fine motor skills activities in groups. One group may colour-in pictures, another may copy letters of the alphabet from the board, and another may cut certain shapes and sizes.

The ECD Centre should provide sufficient outdoor learning material which suits physical needs of four-year-old learners. Outdoor play could give learners a chance to explore the natural environment while learning about themselves and testing their limits. They get to see how fast they can run, how high they can climb or how further they can jump, if they can roll on grass, go down the slide headfirst and more. Physical activities allow mental involvement of learners as they find out, for instance, if cement is hard or soft to fall on. While doing these physical activities, learners need to be able to manage their emotions and reactions, their behaviour and body movements when faced with a situation that they may find difficult. This is where the interwovenness of well-being is evident. Physical, mental and emotional well-being are, therefore, intrinsically linked.

## 8.4.3 Research Question 3:

# How are ECD practitioners pedagogically prepared to plan for the physical activities for fouryear-old learners' readiness for Grade R?

Although practitioners displayed a clear understanding of physical well-being and smoothly infused physical activities into classroom routines, they have no educational qualifications for the job. Therefore, this study recommends that ECD practitioners should be encouraged by the education system to obtain educational qualifications which will enable them to be more pedagogically prepared to further perform their tasks which involve:

a) Planning ways to teach children physical indoor and outdoor activities.

- b) Choosing educational material to suit the physical needs of the children
- c) Coordinating physical activities to help develop motor skills.
- d) Keeping children safe during physical activities.
- e) Discussing the progress of learners with parents and caregivers regarding school readiness in terms of physical well-being.
- f) Applying first aid for sick or injured learners during physical activities.

ECD is particularly crucial where children come from environments of poverty and deprivation. If practitioners are not properly equipped to do their job, it would have a negative and long-term impact on the child's learning abilities. The quality of ECD programmes depends heavily on the knowledge and skills of those who work with young children. It requires that ECD practitioners require continual opportunities for high-quality training. ECD continues to be facilitated largely by women who are not professionally trained. Those who have some training are undervalued and are not remunerated fairly and equitably in comparison with mainstream educators. This makes them be among the most vulnerable workers in the economy. It is up to the government to reverse this status quo.

# 8.4.4 Research Question 4:

# Why do ECD practitioners prepare four-year-old learners' physical well-being and readiness for Grade R in the manner they do?

Four-year-old learners are not fully ready for Grade R physical activities because some still cannot independently perform self-care skills of toileting, washing hands, and putting shoes on and off. This unsatisfactory level of physical readiness is caused by insufficient parental involvement. Insufficient parental involvement is a result of rife poverty in Mandlankala where most homes are low-income. Due to the unemployment rate, many parents are under pressure to provide a day's meal in their households, and as a result, becoming involved or taking part in their children's physical activities is not a priority in these poverty-stricken homes. Some parents work far from home and that poses a challenge for families. Parents who work away from home miss out on much-desired family time and that can hinder a child's well-being and development. Prolonged separation from a parent causes a disconnect between a parent and a child.

This insufficient physical readiness is also caused by the fact that some four-year-old learners arrive at the ECD Centre tired because of the long walking distance to the ECD Centre. Moreover, some learners arrive on an empty stomach. As a result, they struggle to concentrate or stay awake in class. Family structures (mothers as dominant parents, grandparents assuming a parental role, absent fathers, child-headed homes) are also a cause of not propelling the physical well-being of four-year-old learners to the desired extent.

Physical development in four-year-old learners is highly variable because children develop at their own pace. As a result, labelling children as not being school ready at such an early age may cause them to be isolated from a more appropriate learning environment. However, developmental milestones should give a general idea of changes to expect as a child grows. This study identified certain hindrances to the physical well-being of four-year-old learners. Beyond infrastructure, there are many barriers that children face to access quality education. Some children walk for between 30 minutes and an hour to get to their educational institution meaning it is likely to be more than 3km. This is despite the fact that the Department of Transport, in collaboration with the Department of Basic Education, is required to ensure that transport is provided to Grades R to 12 pupils who live more than 3km from their nearest school. For most learners in this study, getting to school every morning remains a daunting task as they have to walk a long distance and for some on an empty stomach. As a result, learners struggle to concentrate or stay awake in class. The long walk to the ECD Centre disorganises learners' concentration in class as some arrive sweaty, stressed and exhausted both physically and psychologically, which compromises their performance. Moreover, a high incidence of late-coming and absenteeism is attributed to this.

This study gives the following recommendations:

- Encouragement of parental and community involvement to improve equity for learners from disadvantaged communities.
- Strengthening of communication and collaboration between ECD centres and parents and communities to foster equity in education.

- Family involvement in early childhood education and care (ECEC) and provide support mechanisms.
- Encourage close parental involvement in children's activities, and in monitoring ECEC services.
- Ensure that pre-service and in-service education and training programmes for ECEC staff lead to a mutual understanding of successful ways to engage parents.
- Have parents involved in the programme and curriculum development of ECEC services.
- Maintain an awareness of power relations and socio-cultural differences between ECD practitioners and learners' families.

# **8.5 SIGNIFICANCE OF THE STUDY**

This study advocates that parenting should not be left to mothers alone. Parenting is a team effort by both parents. Both mother and father play important and different roles in parenting. Family includes fathers too. Absent fathers destabilise the family structure. Absent fathers need to understand the unfairness and irresponsibility of being absent living fathers who leave all the parenting to other family members.

We need not confuse parenting with responsibilities. The tasks of raising a child can be divided equally and interchangeably between both parents. But parenting is much beyond these tasks. It involves promoting a child's well-being, by supporting his/her physical, intellectual, emotional, and social development. While mothers can be better at singing rhymes and dancing silly, fathers can make excellent playmates, especially for physical activities like kicking around a ball. Fathers are their children's first life coaches. No matter how old they become, children always remember that their father taught them how to cycle, that they played their first-ever football game with them, that they always challenged them to be better, and that they always taught them to get up after a fall. Therefore, a father's presence in the life of a child should not be undervalued.

Many individuals can attest to the fact that the lasting impact of a father on a child's life cannot be denied. Many would admit that they have struggled with feelings of abandonment and low self-esteem, due to the lack of a father's love in their lives. Some have turned to drugs, alcohol, risky sexual activities, unhealthy relationships, or other destructive behaviours to numb the pains of fatherlessness. Although the absence of a father is not an isolated risk factor, it definitely can take a toll on the development of children. This is important to take note of, as many would argue that one parental role is more significant than the other.

Most grandparents are not young anymore. Taking care of their four-year-old grandchildren requires physical vitality and mental soundness which most grandparents do not have. This study endorses that the physical well-being of four-year-old learners requires great effort on the part of parents. Self-care skills including toileting, washing of hands, and putting shoes on and off should first be taught at home by parents and caregivers. Parents should make physical activity part of their family's routine by taking family walks or playing active games together despite the pressure of long working hours to provide for their families. They should take their children to places where they can be active, such as public parks, and community recreational centres although this can be challenging for rural places like Mandlankala where one can hardly find such. Parents need to look at the bigger picture by prioritising school readiness through physical well-being because education has the potential of alleviating generational poverty. This study encourages ceaseless parental involvement as it is an extremely rewarding experience for parents to see their children turn into responsible persons and who can abide by what they have been taught. The study recognises that perfection may not always be feasible and the same goes for bringing up children. Parents are humans and may make mistakes but what is more important is to register the mistake and make amends for the betterment of children.

To avoid long walking distances to the ECD Centre, the government needs to provide scholar transport to all four-year-old learners in need. Although some homes cannot afford to provide children with a balanced diet, ECD centres should offer food with proper nutrients so that learners stay healthy and strong enough to perform physical activities which will enable readiness for Grade R.

It is negligent of parents to shift parenting responsibility to grandparents who cannot nurture the physical well-being of four-year-old grandchildren. The upbringing of children should be the duty of parents as primary caregivers. Other family members should be secondary caregivers. Children who find themselves in an unfortunate position of heading homes are still children. They carry the extra weight of taking care of their siblings in totality, including their physical well-being. In child-headed homes, when children take on more family responsibilities (for example, caring for younger siblings), they may miss developmental opportunities because they do not have the time and freedom to pursue age-appropriate activities.

# **8.6 CONCLUSION**

As stated in Chapter 1, this study was founded on the assertion that four-year-old learners should be physically ready to carry out activities that promote their independence and self-sufficiency in Grade R. This study established that most four-year-old learners had a correct pencil grip. They could draw, write, copy and colour. They also had started to learn handwriting by combining fine motor skills, language, memory and concentration. Handwriting started with scribbling and drawing then moved on to forming letters and words. They had begun using blunt-nosed scissors to cut out certain shapes from paper. They could run with ease and increased in speed. They could also skip and jump with more body control. Four-year-old learners could manipulate clothing fasteners, like zippers and buttons, and continued to gain independence in dressing and undressing themselves. However, the glaring physical challenge was the attainment of self-care skills of toileting, washing hands, and putting shoes on and off. ECD practitioners appeared to be experiencing substantial difficulty in coping with learners who have a challenge in performing these self-care skills. Although they could assist learners in terms of self-care skills, the practitioner: learner ratio posed a challenge to ECD practitioners to help every learner in need.

In conclusion, it must be stated that the basic education system of South Africa is in a precarious state. Since the abolition of the 1953 Bantu Education Act, which shaped the education system during the apartheid era, the country is still characterized by significant inequalities in educational outcomes. The South African education system displays dysfunctional behaviour despite the national government developing progressive policies that are in line with international trends. It is apparent that real change is needed. To effect real change, all forms of school leadership must be considered, including an agent that is able to draft, enforce and enact policies for education reform. These include local and national government officials, principals, governing bodies, community leaders and parents.

#### REFERENCES

- Abdalla, Oliveira, Azevedo, & Gonzalez, (2018). Quality in Qualitative Organisational Research: types of triangulation as a methodological alternative. *Administração: Ensinoe Pesquisa*, 19(1), 45-55.
- Abdool Karim, Q., Baxter, C., & Birx, D. (2017). Prevention of HIV in Adolescent Girls and Young Women: Key to an AIDS-Free Generation. *Journal of acquired immune deficiency syndromes* (1999), 75 Suppl 1, S17–S26. https://doi.org/10.1097/QAI.00000000001316
- Abott-Shim, M., Lambert, R., & McCarthy, F. (2003). A Comparison of School Readiness Outcomes for Children Randomly Assigned to a Head Start Programme and the Programme's Waiting List. *Journal of Education for Students Placed at Risk*, 8(2), 191-214.
- Abou-Assali, M. (2014). 'The Nature of Educational Inquiry: Is One Approach Better?' Int. Rev. Cont. Lear. Res, 3(2), 71-76.
- Acharya, D. T. (2018). Including the excluded: Marginalised poor communities and development practices in rural Nepal. [MA Dissertation, University of Queensland].
- Ackerman, D. J. (2006). The Costs of Being a Child Care Teacher: Revisiting the Problem of Low Wages. *Educational Policy*, 20(1), 85-112.
- Adams, W. (2015). Conducting Semi-Structured Interviews. In J. Wholey, H.Hatry, K. Newcomer. *Handbook of Practical Program Evaluation*. (p. 492-505). Jossey-Bass.
- Addison, J. T. (1992). U. Bronfenbrenner. Human Ecology, 20(2), 16-20.
- Adolph K., Tamis-Lemonda, C., & Karasik, L. (2010). Cinderella indeed a commentary on iverson's Developing language in a developing body: the relationship between motor development and language development. J. Child Lang, 37, 269-273.
- Adolph, K. E. & Franchak, J. M. (2017). The development of motor behaviour. Wiley.
- Adolph, K. E., Berger, S. E., & Leo, A. J. (2011). Developmental continuity? Crawling, cruising, and walking. *Developmental science*, 14(2), 306-318.
- Adriany, V. & Warin, J. (2014). Preschool teachers' approaches to care and gender differences within a child-centred pedagogy: findings from an Indonesian kindergarten. *International Journal of Early Years Education*, 22(3), 315-328.
- African Economic Outlook AEO (2020).
  - https://www.afdb.org/sites/default/files/documents/publications/afdb20-
  - 04\_aeo\_supplement\_full\_report\_for\_web\_0705.pdf

African Economic Outlook, Ghana (2014).

https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AEO2014\_EN.p df

- Aldagher, R., Alhadeff, S., Harrell, A., Le Cloux, R., & Moen, J. (2018). Early Lessons in Early Childhood Development: An Analysis of Early Childhood and Development Programs in Developing Countries. UNICEF.
- Al-Hassan, S. & Lansford J.E. (2009). Child, family and community characteristics associated with school readiness in Jordan. *Early Years: An international Journal of Research and Development*, 29(3), 217-226.
- Ahtola, A., Silinskas, G., Poikonen, P.L., Kontoniemi, M., Niemi, P., & Nurmi, J.E. (2011). Transition to Formal Schooling: Do Transition Practices Matter for Academic Performance? *Early Childhood Research Quarterly*, 26(3), 295-302.
- Ahtola, A., Björn, P.M., Turunen, T., Poikonen, P.L., Kontoniemi, M., Lerkkanen, M.K., & Nurmi, J.E. (2016). The Concordance between Teachers' and Parents' Perceptions of School Transition Practices: A Solid Base for the Future. *Scandinavian Journal of Educational Research*, 60(2), 168-181. https/doi.org/ 10.1080/00313831.2014.996598
- Alhassan, A. B. (2018). Left handedness and Stigmatization in Africa: Implications for parents and teachers. *Global Journal of Archaeology and Anthropology*, 7(3), 001-005.
- Ali, A., Pigou, D., Clarke, L. & McLachlan, C. (2017). Literature Review on Motor Skill and Physical Activity in Preschool Children in New Zealand. Advances in Physical Education. 7(1), 10-26.
- Aliyu, A., A., Bello, M., U., Kasim, R., & Martin, D. (2014). Positivist and Non-Positivist Paradigm in Social Science Research: Conflicting Paradigms or Perfect Partners? *Journal* of Management and Sustainability, 4(3), 79-95.
- Allen, G. (2011). Early Intervention: The Next Steps. Crown Copyright.
- Allen, K.P. (2010). Classroom management, bullying and teacher practices. *The Professional Educator*, 34(1), 1-15.
- Allen, L. & Kelly, B. B. (2015). The Science of Children Birth to Age 8: Deepening and Broadening the Foundation for Success. Board on Children, Youth, and Families. Institute of Medicine; National Research Council.
- Almeida, F., Faria, D., & Queirós, A. (2017). Strengths and Limitations of Qualitative and Quantitative Research Methods. *European Journal of Education Studies*, 9(3), 369-387.
- Alshenqeeti, H. (2014). Interviewing as a Data Collection Method: A Critical View. English

Linguistics Research, 3(1), 39-45.

- Al-Sheyab, N. A., Alomari, M. A., Khabour, O. F., Shattnawi, K. K., & Alzoubi, K. H. (2019). Assent and consent in pediatric and adolescent research: school children's perspectives. *Adolescent health, medicine and therapeutics*, 10, 7–14. https://doi.org/10.2147/AHMT.S185553
- Aluwihare-Samaranayake, D. (2012). Ethics in Qualitative Research: A View of the Participants' and Researchers' World from a Critical Standpoint. *International Journal* of Qualitative Methods, 12(2), 64-81.
- Alvarez-Bueno, C., Pesce, C., Cavero-Redondo, I., Sánchez-López, M., Garrido-Miguel, M., & Martínez-Vizcaíno, V. (2017). Academic achievement and physical activity: A metaanalysis. *Pediatrics*, 140, e20171498.
- Amadeo, K. (2020). India's Economy, Its Challenges, Opportunities, and Impact. World Economy.
- Amato, P. R. (2004). Tension between Institutional and Individual Views of Marriage. Journal of Marriage and Family, 66(4), 959-965. http://www.jstor.org/stable/360016
- Amerijckx, G. & Humblet, P. C. (2013). Child Well-Being: What Does It Mean? *Children and Society*, 28(5), 404-415.
- Amod, Z., & Heafield, D. (2013). School readiness assessment in South Africa. In S. Laher & K. Cockcroft (Eds.), *Psychological Assessment in South Africa: Research and applications* (pp. 74–85). Wits University Press. https://doi.org/10.18772/22013015782.11
- Amrein, K., Scherkl, M., Hoffmann, M., Neuwersch, S., Köstenberger, M., Berisha, A. Martucci, G., Pilz, S., & Malle, O. (2020). Vitamin D deficiency 2.0: an update on the current status worldwide. *European Journal of Clinical Nutrition*. 74. 1-16.
- Annadale, R. (2019). Grade 1 Teachers' Experiences of Learners' Pre-handwriting Challenges. [Masters Dissertation, North West University]. https://repository.nwu.ac.za/handle/10394/33179
- Annadale, R. (2019). Pre-handwriting Skills Learners Should Master at the Beginning of Grade
  1. *Literacy Information and Computer Education Journal (LICEJ)*, 10 (3), 3258-3263.

Antwi, S. K. & Kasim, H. (2015). Qualitative and Quantitative Research Paradigms in Business

Research: A Philosophical Reflection. *European Journal of Business and Management*, 7(3), 217-225.

- Armstrong, J. (2010). Naturalistic inquiry. In N. J. Salkind (Ed.), *Encyclopedia of research design* (pp. 881-885). SAGE Publications.
- Ashley-Cooper, M., van Niekerk, L., & Atmore, E. (2019). Early Childhood Development in South Africa: Inequality and Opportunity. In book: *South African Schooling: The Enigma* of Inequality. https://10.1007/978-3-030-18811-5\_5
- Aspers, P. & Corte, U. (2019). What is Qualitative in Qualitative Research? *Qualitative Sociology* 42, 139–160.
- Atinc, T. & Gustafsson-Wright, E. (2013). *Early Childhood Development: The Promise, the Problem, and the Path Forward.* Costing Early Childhood Development.
- Atkinson, S., Bagnall, A., Corcoran, R., South, J., & Curtis, S. (2019). Being Well Together: Individual Subjective and Community Well-being. J Happiness Stud https://doi.org/10.1007/s10902-019-00146-2
- Atmore, C. (2009). Response to the National Human Rights Consultation. Policy, 3(9652), 1506.
- Atmore, E. (2013). Early Childhood Development in South Africa--Progress Since the End of Apartheid. *International Journal of Early Years Education*, 21(2-3),152-162.
- Atmore, E. (2019). An Interpretive Analysis of the Early Childhood Development Policy Trajectory in Post-apartheid South Africa. [PhD Thesis. University of Cape Town].
- Atmore, E. (2019). Imam Abdullah Haron Education Trust Memorial Lecture. The Cape Argus.
- Atmore, E. (2020). An Interpretive Analysis of the Early Childhood Development Policy Trajectory in Post-apartheid South Africa. [Doctoral Thesis, Stellenbosch University]. https://cecd.org.za/wpcontent/uploads/2020/01/eric\_atmore\_interpretive\_analysis\_of\_ecd\_policy\_in\_postapartheid\_south\_africa.pdf
- Atmore, E., van Niekerk, L., & Ashley-Cooper, M. (2012). Challenges facing the early childhood development sector in South Africa. South African Journal of Childhood Education, 2(1), 120-139.
- Aubrey, C. (2017). Sources of Inequality in South African Early Childhood Development Services. *South African Journal of Childhood Education*, 7(1), 1-9.
- Aubrey, C. David, T., Godfrey, R., & Thompson, L. (2000). *Early Childhood Educational research: issues in methodology and ethics*. Routledge/Falmer.

- Aunio, P., Mononen, R., Ragpot, L. & Törmänen, M. (2016). Early numeracy performance of South African school beginners. South African Journal of Childhood Education, 6(1), a496. http://dx.doi.org/10.4102/sajce.v6i1.496
- Ayeni, O.G. & Olowe, M.O. (2016). The Implication of Large Class Size in the Teaching and Learning of Business Education in Tertiary Institution in Ekiti State. *Journal of Education and Practice*, 34(7), 65-69.
- Babbie, E. R. &. Mouton, J. (2001). The practice of social research. Oxford University Press.
- Babbie, E. & Mouton, J. (2002). The practice of social research. Wadsworth Group.
- Babić, N. (2014). Contemporary childhood: theoretical approaches, practices and research. Osijek, Faculty of Philosophy, JJ Strossmayer University in Osijek.
- Backhouse, J. & Graham, A. (2013). Grandparents Raising Their Grandchildren: Acknowledging the Experience of Grief. *Australian Social Work*, 66(3).
- Badakar C, Thakkar P, Hugar S, Kukreja P, Assudani, H., & Gokhale, N. (2017). Evaluation of the Relevance of Piaget's Cognitive Principles among Parented and Orphan Children in the Belagavi City, Karnataka, India: A Comparative Study. *Int J Clin Pediatr Dent.*, 10(4), 346-350.
- Bahrami, N., Soleimani, M., Yaghoobzadeh, A. & Ranjbar, H. (2016). Researcher as an Instrument in Qualitative Research: Challenges and Opportunities. *SBMU Journals*, 90, 25.
- Baker, B. (1997). Anthropology and teacher preparation: Some possibilities and precautions. *Queensland Journal of Educational Research*, *13*(2), 41-58.
- Baker, M. (2006). Observation: A Complex Research Method. Library Trends, 55(1), 171-189.
- Bakken, L., Brown, N., & Downing, B. (2017). Early childhood education: The long-term benefits. *Journal of Research in Childhood Education*, 31(2), 255-269. https://doi.org/10.1080/02568543.2016.1273285
- Baloyi, T.V. & Makhubele, J.C. (2016). Challenges impeding the successful implementation of early childhood development programmes in South Africa: implications for practice, *Gender and Behaviour*, 16(1), 10773 – 10783.
- Bamitale, T. & Boluwaji, J. (2013). Role of Physical Activity and Motor Learning in Child Development. *Journal of Nigeria Association of Sport Science and Medicine*. 15(1), 239-247.

- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American psychologist*, 37(2), 122.
- Barbarin, O. A., Early, D., Clifford, R., Bryant, D., Frome, P., Burchinal, M., Howes, M., & Pianta, R. (2008). Parental Conceptions of School Readiness: Relation to Ethnicity, Socio-Economic Status and Children's Skills, *Early Education and Development*, 19(5), 671-701.
- Bardma, K. & Sandhu, R. (2018). Opinion / Making early childhood education a priority. https://www.livemint.com/Opinion/iY8Xbc1fz9RX0BmoUCTszI/Opinion--Makingearly-childhood-education-a-priority.html
- Barnard, E. & Braund, M., (2016). Strategies for the implementation of mathematics in Grade
  R: Teachers' beliefs and practices, *South African Journal of Childhood Education* 6(1), a409. http:// dx.doi.org/10.4102/sajce. v6i1.409
- Barnett, L. M., Morgan, P.J., van Beurden, E., & Beard, J. R. (2008). Perceived Sports Competence Mediates the Relationship between Childhood Motor Skill Proficiency and Adolescent Physical Activity and Fitness: A Longitudinal Assessment. *International Journal of Behavioural Nutrition and Physical Activity*, 5, 40-52.
- Barreau, S., Carneiro, P., Chowdry, H., Crawford, C., Dearden, L., Goodman, A., Gregg, P., Macmillan, L., Sibieta, L., Sylva, K., & Washbrook, L. (2008). *The socio-economic gradient in child outcomes: the role of attitudes, behaviours and beliefs*. Joseph Rowntree Foundation.
- Bassett, D.R., John, D., Conger, S.A., Fitzhugh, E.C., & Coe, D.P. (2015). Trends in Physical Activity and Sedentary Behaviours of United States Youth. J Phys Act Health, 12(8), 1102-1111.

Bate, P., Robert, G., Fulop, N., Øvretviet, J., & Dixon-Woods, M. (2014). *Perspectives on context: a collection of essays considering the role of context in successful quality improvement.* Health Foundation.

- Baxter, P., & Jack, S. (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, 13 (4), 544-559.
- Becker, S.P., Langberg, J.M., & Byars, K.C. (2015). Advancing a Biopsychosocial and Contextual Model of Sleep in Adolescence: A Review and Introduction to the Special Issue. *Journal of Youth Adolescence*, 44, 239–270. https://doi.org/10.1007/s10964-014-0248-y

Beeld. (2008). Mbeki erkrn regering se beplanning is nie oppyl. [Mbeki admits that the

government's planning is not on schedule]. Beeld. 9 February 2021.

- Begnoche, D. M., Chiarello, L. A., Palisano, R. J., Gracely, E. J., McCoy, S. W., & Orlin, M.
  N. (2016). Predictors of Independent Walking in Young Children with Cerebral Palsy. *Physical therapy*, 96(2), 183–192. https://doi.org/10.2522/ptj.201403
- Ben-Arieh, A., Kaufman, NH., Andrews, AB., George, RM., Lee, BJ., & Aber, J.L. (2000). *Measuring and monitoring children's well-being*. Kluwer Academic Press
- Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *Nursing Plus Open*, 2, 8-14.
- Bennett, R., Hosegood, V., Newell, M., & McGrath, N. (2014). Understanding family migration in rural South Africa: exploring children's inclusion in the destination household of migrant parents. *Population, Space and Place*. http://doi:10.1002/psp.1842
- Bergen, D. (2008). *Human development: Traditional and contemporary theories*. Prentice Hall.
- Berk, L. E. (2000). Child Development (5th ed.). Allyn and Bacon.
- Berk, L. E. (2007). Development through lifespan (4th ed.). Allyn and Bacon.
- Bertram, C. & Christiansen, I. (2014). Understanding research. An introduction to reading research. Van Schaik Publishers.
- Bhorat, H. I., Van der Westhuizen, C. & Jacobs, T. (2009). Income and Non-Income Inequality in Post-Apartheid South Africa: What are the Drivers and Possible Policy Interventions? *SSRN Electronic Journal*. https//doi/10.2139/ssrn.1474271
- Biba, R. (2013). The case study as a type of qualitative research. *Journal of Contemporary Educational Studies*, 28-43.
- Bipath, K. & Joubert, I. (2016). The Birth of a New Qualification of ECD. (27 May, 2016) Mail & Guardian.
- Blanche, M.T., Durrheim, K. & Painter, P. (2012). Research in practice. UCT Press.
- Blandford, A. (2013). Semi-structured qualitative studies. In: Soegaard, Mads and Dam, Rikke Friis (eds.). *The Encyclopedia of Human-Computer Interaction*. The Interaction Design Foundation. http://www.interactiondesign.org/encyclopedia/semistructured\_qualitative\_studies.html
- Boddy, C. (2019), Causality in qualitative market and social research. *Qualitative Market Research*, 22(3), 405-413.
- Boehm, J. K., Kubzansky, L. D. (2012). The heart's content: The association between positive

psychological well-being and cardiovascular health. *Psychological Bulletin*, 138(4), 655-691. https://doi:10.1037/a0027448

- Boethel, M. (2004). *Readiness: School, Family, & Community Connections*. National Center for Family and Community Connections with Schools.
- Bolderston, A. (2008). Writing an Effective Literature Review. *Journal of medical imaging and radiation sciences*, *39*(2), 86-92. https://doi.org/10.1016/j.jmir.2008.04.009
- Bohorquez, C. E. (2010). A Study of the Hermeneutics of Hans-Georg Gadamer and Paul Ricoeur. [PhD Thesis. Boston College University].
- Boland, R. J. (1985) Phenomenology: a preferred approach to research in information systems, in Research *Methods in Information Systems*, Mumford, E., Hirschheim, R., Fitzgerald, G., and Wood-Harper T. (eds) (Elsevier Science Publications B.V., North-Holland), pp.193-201.
- Bolderston A. (2008). Writing an Effective Literature Review. *Journal of medical imaging and radiation sciences*, *39*(2), 86–92. https://doi.org/10.1016/j.jmir.2008.04.009
- Bondi, D., Prete, G., Malatesta, G., & Robazza, C. (2020). Laterality in children: evidence for task-dependent lateralization of motor functions. *International journal of environmental research and public health*, 17(18), 6705.
- Borland, J. H. (Ed.). (2003). Rethinking gifted education. Teachers College Press.
- Bowes, J., Watson, J., & Pearson, E. (2009). *Children, Families and Communities: Contexts and Consequences*. Oxford University Press.
- Bowman, B., Donovan, M. & Burns, M. (2001). Eager to Burns, M. (2001). Eager to Predictors of Independent Walking in Young Children with Cerebral Palsy, *Physical Therapy*, 96(2),183-192.
- Bradley, R. H. & Corwyn, R. F. (2005). Caring for children around the world: A view from HOME. *International Journal of Behavioral Development*, 29 (6), 468-478.
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.
- Braun, V. & Clarke, V. (2012) Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A.
  T. Panter, D. Rindskopf & K. J. Sher (Eds.), APA Handbook of research methods in psychology, (2): Research designs: Quantitative, qualitative, neuropsychological, and biological. American Psychological Association.
- Breiner, H., Ford, M. & Gadsden V. L. (2016). Parenting Matters: Supporting Parents of

Children Ages 0-8. National Academies Press.

Brewerton, P. & Millward, L. (2002). Organisational research methods. Sage.

Bridges, R. (n.d.). Bronfenbrenner's Ecological Systems Theory.

- Brink, S. (2016). Employing a multifocal view of ECD curriculum development at a rural settlement community in South Africa: Themes from a "design by implementation" early childhood education programme. *South African Journal of Childhood Education*. 6(1), 405-410.
- Bronfenbrenner (Ed.) Making human beings human (pp.3-15). Thousand Oaks, CA: Sage. (Reprinted from N.J. Smelser and P.B. Baltes (Eds.), *International encyclopaedia of the social and behavioural sciences*, 10, 6963-6970.
- Bronfenbrenner U. & Morris, P. A. (1998). The ecology of developmental processes. In: Lerner RM, org. *Handbook of child psychology: Theoretical models of human development*. John Wiley & Sons, pp. 993-1028.
- Bronfenbrenner, U. (1974). Developmental research, public policy, and the ecology of childhood. *Child development*, *45*(1), 1-5.
- Bronfenbrenner, U. (1975). Reality and research in the ecology of human development. *Proceedings of the American Philosophical Society*, *119*(6), 439-469.
- Bronfenbrenner, U. (1976). The experimental ecology of education. *Teachers College Record*, 78(2), 157–204.
- Bronfenbrenner, U. (1977a). Lewinian space and ecological substance. *Journal of Social Issues*, *33*(4), 199-212.
- Bronfenbrenner, U. (1977b). Toward an experimental ecology of human development. *American Psychologist*, 32 (7), 513–531.
- Bronfenbrenner, U. (1978). The social role of the child in ecological perspective. *Zeitschrift für Soziologie*, 7 (1), 4–20.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Bronfenbrenner, U. (1979a) Contexts of child rearing. American Psychologist, 34, 844-858.
- Bronfenbrenner, U. (1979 b) *The ecology of human development: Experiments by nature and design.* Harvard University Press.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental psychology*, 22(6), 723.
- Bronfenbrenner, U. (1989). Ecological systems theory. *Annals of Child Development*, 6, 187-249.

- Bronfenbrenner, U. (1990). Who cares for children? *Research & Clinical Center for Child Development, 12, 27-40.*
- Bronfenbrenner, U. (1993). The ecology of cognitive development: Research models and fugitive findings. *Development in context: Acting and thinking in specific environments*, *3*, 46.
- Bronfenbrenner, U. (1995). Developmental ecology through space and time: A futurePerspective. In P Moen, G. H. Elder, Jr. & K. Luscher (Eds), *Examining lives in context* (pp.619-647). Washing DC, American Psychological Association.
- Bronfenbrenner, U. (1999). Environments in developmental perspectives: Theoretical and Operational Models, In S. L. Friedman & T. D. Wachs (Eds), *Measuring the environment* across the life span: emerging methods and concepts (Washing DC, American Psychological Association) 3-28.
- Bronfenbrenner, U. (2001). The biological theory of human development In N. J. Smelser & P. B. Baltes (Eds.), *International encyclopedia of the social and behavioral sciences*, (10), 6963-6970.
- Bronfenbrenner, U. (2005). Ecological systems theory (1992). In U. Bronfenbrenner (Ed.), Making human beings human: Bioecological perspectives on human development (pp. 106–173). Sage Publications Ltd.
- Bronfenbrenner, U. (2005). Strengthening family systems. In U. Bronfenbrenner (Ed.) Making Human Beings Human: Bioecological Perspectives on Human Development. (pp.210-214). Sage.
- Bronfenbrenner, U. (2005a). *The developing ecology of human development paradigm lost or paradigm regained?* Harvard University Press.
- Bronfenbrenner, U., & Ceci, S. J. (1993). Heredity, environment, and the question "How?": A first approximation. In R. Plomin & G. E. McClearn (Eds.), *Nature, nurture & psychology* (pp. 313–324). American Psychological Association. https://doi.org/10.1037/10131-015
- Bronfenbrenner, U., & Ceci, S. J. (1994). Nature-nurture reconceptualized in developmental perspective: a bioecological model. *Psychological review*, 101(4), 568–586. https://doi.org/10.1037/0033-295x.101.4.568
- Bronfenbrenner, U., & Morris, P. A. (2006). *The Bioecological Model of Human Development*.
  In R. M. Lerner & W. Damon (Eds.), *Handbook of child psychology: Theoretical models of human development* (pp. 793–828). John Wiley & Sons Inc.

- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet* (*London*, *England*), 395(10227), 912–920. https://doi.org/10.1016/S0140-6736(20)30460-8
- Brown, D.L. & Swanson L.E. (eds.) (2003). *Challenges for rural America in the twenty-first century*. The Pennsylvania State University Press.
- Brown, G. C. (2010). Improving fine Motor skills in young children: An intervention study. *Educational Psychology in Practice*. 26, 269-278.
- Bruwer, M., Hartell, C. & Steyn, M. (2014). Inclusive education and insufficient school readiness in Grade 1: Policy versus practice. South African Journal of Childhood Education. 4(2), 18-35.
- Burla, L., Knierim, B., Barth, K. L., Duetz, M. & Abel, T. (2008). From the text to coding: Intercoder reliability assessment in qualitative content analysis. *Nursing Research*, 57, 113-117.
- Burney, V. H. & Beilke, J. R. (2008). The constraints of poverty on high achievement. *Journal for the Education of the Gifted*, 31(3),171-197.
- Burns, N. & Grove, S.K. (2007). Understanding nursing research Building an evidence-based practice (4th Edition), Saunders Elsevier.
- Cantor, P.; Osher, D.; Berg, J.; Steyer, L. & Rose, T. (2019). Malleability, plasticity, and individuality: How children learn and develop in context, *Applied Developmental Science*, 23(4). 307-337, https://doi/10.1080/10888691.2017.1398649
- Carlitz, R. D., & Makhura, M. N. (2021). Life under lockdown: Illustrating tradeoffs in South Africa's response to COVID-19. *World development*, *137*, 105168. https://doi.org/10.1016/j.worlddev.2020.105168
- Carlson, A. G.; Rowe, E. & Curby, T.W. (2013). Disentangling Fine Motor Skills Relations to Academic Achievement: The Relative Contributions of Visual-Spatial Integration and Visual-Motor coordination. *The Journal of Genetic Psychology*, 174(5), 514-533.
- Castelli, D., Barcelona, J., Glowacki, E., & Calvert, H. (2014). Active Education: Growing Evidence on Physical Activity and Academic Performance. Retrieved from https://www.researchgate.net/publication/269708986

Cavana, R. Y., Delahaye, L. B., & Sekaran, U. (2001). Applied Business Research Qualitative

and Quantitative Methods (1<sup>st</sup> Edition). John Wiley and Sons, Ltd.

- Ceka, A. & Murati, R. (2016). The Role of Parents in the Education of Children. *Journal of Education and Practice*, 5(7),61-64.
- Centre on the Developing Child at Harvard University (2010). *The Foundations of Lifelong Health Are Built in Early Childhood*. http://www.developingchild.harvard.edu
- Centre for Integrated Healthcare (2013). *Defining Excellence in the 21<sup>st</sup> Century*. https://www.thehumancapitalhub.com/articles/Why-Self-Esteem-Is-Important-And-How-You-Can-Improve-Yours
- Chan, M. (2015). Investing in early child development: an imperative for sustainable development. *Annals of the New York Academy of Sciences*. 1308 (1). vii viii.
- Chan, W. L. (2012). Expectations for the Transition from Kindergarten to Primary School amongst Teachers, Parents and Children, *Early Child Development and Care*, 182(5), 639-664.
- Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis.* Sage Publications.
- Chenail, R. J. (2012). Conducting Qualitative Data Analysis: Reading Line-by-Line but Analysing by Meaningful Qualitative Units. *The Qualitative Report.* 17(1), 266-269.
- Chidziva, V., & Heeralal, P. J. H. (2016). Circumstances leading to the establishment of childheaded households. *International Journal for Innovation Education and Research*, 4(10), 91–102. https://doi.org/10.31686/ijier.vol4.iss10.601
- Chimbindi N, Mthiyane N., Birdthistle I., Floyd S., McGrath N., Pillay D., Seeley, J., Zuma, T., Dreyer, J., Gareta, D., Mutevedzi, T., Fenty, J., Herbst, K., Smit, T., Baisley, K. & Shahmanesh, M. (2018) Persistently high incidence of HIV and poor service uptake in adolescent girls and young women in rural KwaZulu-Natal, South Africa prior to DREAMS. *PLoS ONE* 13(10),e0203193. https://doi.org/10.1371/journal.pone.0203193
- Chin-Kai Lin, L.F.M., Ya-Wen, Y., Che-Kuo, C. & Kuan-Hua, L. (2014). Factor analysis of the Contextual Fine Motor Questionnaire in Children. *Research in Developmental Disabilities*, 35, 512-519.
- Cho, J. & Trent, A. (2006). Validity in qualitative research revisited. *Qualitative research*, 6(3), 319-340.
- Choi, M., Sprang, G., & Eslinger, J. (2016). Grandparents raising grandchildren: A synthetic review and theoretical model for interventions. *Family & Community Health*, 39,120-128.
- Chopra, N. (2012). A study of early childhood education programmes in Delhi, India. *International Journal of Early Years*, 20(2), 1-16.
- Chowdhury, M. F. (2014). Interpretivism in Aiding Our Understanding of the Contemporary Social World. *Open Journal of Philosophy*, 4(3), 432-438.
- Chyu, L., Pebley, A. R., & Lara-Cinisomo, S. (2005). *Patterns of Child Care Use for Preschoolers in Los Angeles County*. https://doi.org/10.7249/TR116
- CNN World (2019). Katy Scott interviews Mthandazo Ndlovu (Oxfam South Africa's democracy and governance manager). 1538 GMT (2338 HKT) May 10, 2019.

Cohen D, Crabtree B. (2006). *Qualitative Research Guidelines Project*. http://www.qualres.org/HomeInte-3516.html

- Cohen, G. L. & Sherman, D. K. (2014). The psychology of change: Self-affirmation and social psychological intervention. *Annual Review of Psychology*, 65, 333-371.
- Cohen, L, Manion, L. & Morrison K, (2000). *Research Methods in Education*, (5th edition). Routledge.
- Cohen, L., Manion, L. & Morrison, K. (2007). Research methods in education, Routledge.
- Cohen, L., Manion, L. & Morrison, K. (2011), *Research Methods in Education*, (7th ed.), Routledge.
- Coibion, O., Gorodnichenko, Y., & Weber, M. (2020). *Labor markets during the COVID-19 crisis: A preliminary view* (No. w27017). National Bureau of economic research.
- Commodari, E. (2013). Preschool teacher attachment, school readiness and risk of learning difficulties. *Early Childhood Research Quarterly*, 28(1), 123-133. https://doi.org/10.1016/j.ecresq.2012.03.004g
- Compton, A. N. (2016). Strategies for Increasing Parental Involvement for Elementary School Students. *Walden Dissertations and Doctoral Studies*. 2645. https://scholarworks.waldenu.edu/dissertations/2645
- Compton, E. (2019). Education for Rural Development. *Scientific e-Resources*. https://play.google.com/store/books/details/Education\_for\_Rural\_Development?id=seL EDwAAQBAJ&hl=en\_US&gl=US

Connor CM & Morrison FJ. Services or Programs that Influence Young Children's Academic

Success and School Completion. In: Tremblay RE, Boivin M, Peters RDeV, eds. Vitaro F, topic ed. *Encyclopedia on Early Childhood Development*. http://www.child-encyclopedia.com/school-success/according-experts/services-or-programs-influence-young-childrens-academic-success-and. Updated May 2014.

- Consultative Group on Early Childhood Care and Development CGECCD (2013). Education for All Monitoring Report.
- Cowan, P.A. & Cowan, C.P. (2009). The Role of Parents in Children's School Transition. In: Tremblay, R.E., Boivin, M., Peters, R.De.V., eds. *Encyclopedia on Early Childhood Development*.http://www.child-encyclopedia.com/schoolreadiness/accordingexperts/role-parents-childrens-school-transition.
- Cresswell, J. W. (2003). Research design. SAGE Publications.
- Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Sage.
- Creswell, J. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson.
- Creswell, J. W., Hanson, W. E., Clark Plano, V. L. & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counselling Psychologist*, 35(2), 236-264.
- Creswell, J.W. & Plano Clark V. L. (2011). *Designing and conducting mixed methods research*.Sage Publications.
- Cropley, A. J. (2019). *Qualitative research methods: A practice-oriented introduction for students of psychology and education.* Riga, Latvia: Zinātne. https//doi.org/10.13140/RG.2.1.3095.6888
- Crossman, A. (2020). *An Overview of Qualitative Research Methods*. ThoughtCo. thoughtco.com/qualitative-research-methods-3026555.
- Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A. & Sheikh, A. (2011). The case study approach. *BMC medical research methodology*, 11, 100. https://doi.org/10.1186/1471-2288-11-100
- Curtin, M. & Fossey, E. (2007). Appraising the trustworthiness of qualitative studies: Guidelines for occupational therapists. *Australian Occupational Therapy Journal*, 54, 88-94.

- Daher, M., Carré, D., Jaramillo, A., Olivares, H. & Tomicic, A. (2017). Experience and Meaning in Qualitative Research: A Conceptual Review and a Methodological Device Proposal. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 18(3), 9.
- Daily-Diamond, C. A., Gregg, C.E. & O'Reilly, O.M. (2017). The Roles of Impact and Inertia of a Shoelace Knot. *Royal Society*, 473(2200).
- Daniel, E. (2016). The Useful of Qualitative and Quantitative Approaches and Methods in Researching Problem-Solving Ability in Science Education Curriculum. *Journal of Education and Practice*, 15(7), 91-100.
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Baron, B. & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied developmental Science*, 24(2), 97-140.
- Darvesh, N., Das, J. K., Vaivada, T., Gaffey, M. F., Rasanathan, K. & Bhutta, Z. A. (2017).
  Water, sanitation and hygiene interventions for acute childhood diarrhea: a systematic review to provide estimates for the Lives Saved Tool, *BMC Public Health*, 17. doi:10.1186/s12889-017-4746-1
- Davids, M., Samuels, M.L., September, R., Moeng, T.L., Richter, L., Mabogoane, T.W., Goldman, I. & Buthelezi, T. (2015). The pilot evaluation for the national evaluation system in South Africa: A diagnostic review of early childhood development. *African Evaluation Journal*, 3(1), 1-141.
- Davis, K.D., Lawson, K. M., Almeida, D. M., Kelly, E. L., King, R. B., Hammer, L., Casper, L.M., Akechukwu, C.A., Hanson, G. & McHale, S. M. (2015). Parents' Daily Time with their Children: A Workplace Intervention. *Pediatrics*, 135(5), 17-35.
- De Jong, M. (2010). Some reflections on the use of psychiatric diagnosis in the looked after or "in care" child population. *Clinical Child Psychology and Psychiatry*, 15(4), 589-599.
- De Vos, A.S. Strydom, H., Fouche', C.B. & Delport, C.S.L. (2011). *Research at grass roots*. Van Schaik.
- Dean, B. A. (2018). The interpretivist and the learner. International Journal of Doctoral Studies, 13, 1-8. https://doi.org/10.28945/3936
- Deci, E. L., Ryan, R. M. (2008). Hedonia, eudaimonia, and well-being: An introduction. *Journal of Happiness Studies*, 9(1), 1–11.
- DeJonckheere M. & Vaughn L. M. (2019). Semi structured interviewing in primary care

research: a balance of relationship and rigour. *Family Medicine and Community Health*. doi: 10.1136/fmch-2018-000057

- Denzin, N. & Lincoln, Y. (2005). Introduction: The discipline and practice of qualitative research. In Norman Denzin and Yvonna Lincoln (Eds.), *The SAGE handbook of qualitative research* (pp.1-32). Sage
- Denzin, N. K. & Loncoln, Y. (2003) (Eds). *The Landscape of Qualitative Research: Theories and Issues.* (2nd Edition). SAGE.
- Denzin, N. K. & Lincoln, Y. S. (Eds.). (1994). Handbook of qualitative research. Sage Publications, Inc.
- Denzin, N. & Lincoln, Y. (Eds.). (2005). *Handbook of qualitative research* (3rd ed.). Sage.
- Department of Basic Education. (2015). *The South African National Curriculum Framework for children from Birth to Four*. Government Press.
- Department of Basic Education. (2015). National Curriculum Framework. Government Press.
- Department of Education (1995). White Paper 5 on Education and Training. Government Press.
- Department of Education (DOE). (2001). *White Paper 5 Early Childhood Development*. Government Press.
- Department of Education (2002). *Revised National Curriculum Statement (RNCS) R-9*. Government Press.

Department of Education. (2011). ANA a tool to focus attention on core functions of education. Government Press.

- Department of Higher Education and Training (2013). *White Paper for Post-school Education*. Government Press.
- Derksen, T. (2010). The Influence of Ecological Theory in Child and Youth Care: A Review of the Literature. *International Journal of Child, Youth and Family Studies*. 3/4 (1). 326-339.

Dietze, B. & Kashin, D. (2019). Playing and learning in early childhood education. Pearson.

Dimitrov, C. (2019). Philosophical Hermeneutics Between Gadamer and Ricoeur. (Ed). Gergana Popova [online] part 1: notabene-bg.org/index.php#873 part 2: notabenebg.org/index.php#874

Dinehart, L.H.B. & Manfra L. (2013). Association between early fine motor development and

later math and reading achievement in early elementary school. *Early Learning and Development*. 24(2).138–161.

Dixon, K., Janks, Botha, H., Earle, D., Poo, K., M., Oldacre, F., Pather, K., & Scheider, K.
(2018). A Critical Analysis of CAPS for Life Skills in the foundation Phase (Grade R-3). *Journal of Education*. 71. 6-23.

Dlamini-Zuma, N. (2020). Declaration of a national state of disaster. Pretoria

- Dodge, R., Daly, A., Huyton, J., & Sanders, L. (2012). The challenge of defining well-being. *International Journal of Well-being*. 2(3), 222-235.
- Doherty, G. (2007). *Conception to age six: The foundation of school-readiness*. The Learning Partnership.
- Doherty, R. W. (1997). The Emotional Contagion Scale: A Measure of Individual Differences. *Journal of Nonverbal Behaviour*, 21, 131-154.
- Doherty, W. J., Boss, P. G., LaRossa, R., Schumm, W. R., & Steinmetz, S. K. (1993). Family theories and methods: A contextual approach. In P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, & S. K. Steinmetz (Eds.), *Sourcebook of family theories and methods: A contextual approach* (pp. 3–30). Plenum Press. https://doi.org/10.1007/978-0-387-85764-0\_1
- Dordic, V., Tubic, T. & Jaksic, D. (2016). *The relationship between physical, motor, and intellectual development of preschool children*. Annual International Scientific Conference Early Childhood Care and Education (ECCE). 12-14 May 2016, Moscow, Russia. doi: 10.1016/j.sbspro.2016.10.114
- Dowling, M. (2006). Approaches to reflexivity in qualitative research. *Nurse Researcher*, 13(3), 7-21.
- Downer, J. T. & Mendez, J. L. (2005). African American father involvement and preschool *Early Education & Development*, 16(3). 317-334.
- Drew, W.F, Christie, J., Johnson, J.E., Meckley, A.M., Nell, M. L. & Chalufour, I. (2008). A value-added Strategy for Meeting Early Learning Standards. *YC Young Children*. 63(4). 38-48.
- Drummond, M. J. (2010). Assessment in the Early Years in International Encyclopedia of Education (3rd Edition). Sage

- Duijster, D., de Jong-Lenters, M., Verrips, E., & van Loveren, C. (2015). Establishing oralhealth promoting behaviours in children - parents' views on barriers, facilitators and professional support: a qualitative study. *BMC Oral Health*, 15, 157. https://doi.org/10.1186/s12903-015-0145-0
- Duncan, G. J., & Brooks-Gunn, J. (2000). Family poverty, welfare reform, and child development. *Child development*, 71(1), 188-196.
- Duncan, G., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P, Japel,
  C. (2007). School readiness and later achievement. *Developmental Psychology*. 43, 1428-1446.
- Dunham, S., Lee, E., & Persky, A. M. (2020). The Psychology of Following Instructions and Its Implications. *American journal of pharmaceutical education*, 84(8), ajpe7779. https://doi.org/10.5688/ajpe7779
- Đurišić, M. & Bunijevac, M. (2017). Parental Involvement as an Important Factor for Successful Education, C E P S Journal, 7(3),137-153.
- Ebrahim, H., Seleti, J., & Dawes, A. (2013). Learning Begins at Birth: Improving Access to early Learning. *South African Child Gauge*. 66-71.
- Eddy, M.M., Eddy, Thomson-de Boor, H. & Mphaka, K. (2013). "So we are ATM fathers": A Study of Absent Fathers in Johannesburg. Centre for Social Development in Africa, University of Johannesburg.
- Elder, G. H., Jr. (1995). The life course paradigm: Social change and individual development.
  In P. Moen, G. H. Elder, Jr., & K. Lüscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 101–139). American Psychological Association. https://doi.org/10.1037/10176-003
- Elliott, V. (2018). Thinking about the Coding Process in Qualitative Data Analysis. *The Qualitative Report*, 23(11), 2850-2861.
- Emser, M. & Van Der Watt, M. (2019). #Stillnotfound: Missing Children in South Africa, *Alternation* 26(1), 89 – 120.
- Erasmus, H. (2018). *How do I know If My Child Is School-Ready?* https://www.impaq.co.za/blog/know-child-school-ready/
- Erasmus, M, Van Rensburg, O. J., Pienaar, A. E., & Ellis, S. (2011). Deficiencies within the Education System with Regard to Perceptual Motor Learning of Grade R Learners. *South African Journal of Early Childhood Education*. 21(2). 46-63.

- Erickson, K., Hillman, C., & Kramer, A. (2015). Physical activity, brain, and cognition. *Curriculum Opinion Behavioural. Science*. 4, 27-32.
- Eriksson, M., Ghazinour, M., & Hammarström, A. (2018). Different uses of Bronfenbrenner's ecological theory in public mental health research: what is their value for guiding public mental health policy and practice? *Social Theory and Health*. 16. 414-433. https://doi.org/10.1057/s41285-018-0065-6
- Erwin H., Fedewa A., Beighle A. & Ahn S. (2012) A quantitative review of physical activity, health, and learning outcomes associated with classroom-based physical activity interventions. *J Appl Sch Psychol*,28(1), 14-36.
- Esterhuizen, S. & Grosser, M. (2014). Improving some cognitive functions, specifically executive functions in Grade R learners. *South African Journal of Childhood Education*. 4(1), 111-138.
- Ettekal, A. & Mahoney, J. L. (2017). Ecological Systems Theory: The SAGE Encyclopedia of Out-of-School Learning, Sage Publishers, Editors: Kylie Peppler, pp.239-241
- Ewing, L.A. & Vu, H. Q. (2020). Navigating 'Home Schooling' during COVID-19: Australian public response on Twitter. *Media International Australia*. https://1329878X20956409.
- Excell, L. & Linington, V. (2011). Move to literacy: Fanning emergent literacy in early childhood education in a pedagogy of play. *South African Journal for Early Childhood*, *1*(1), 1–23.
- Fancher, R. E. & Rutherford, A. (2012). Pioneers of Psychology: A History. W.W. Norton.
- Fauth, B. & Thompson, M. (2009). Young Children's Well-being: Domains and Contexts of Development from Birth to Age 8. National Children Bureau Research Centre.
- Fauth, R. C., Roth, J. L. & Brooks-Gunn, J. (2007). Does the neighbourhood context alter the link between youth's after-school time activities and developmental outcomes? A Multilevel Analysis. *Developmental Psychology*, 43 (3), 760-777
- Feldman, D. H. (2003). A developmental, evolutionary perspective on giftedness. In Borland,J. (Ed.), *Rethinking gifted education* (pp. 9–33). Teachers College Press.
- Fenech, M. (2013). Quality early childhood education for my child or for all children? Parents as activists for equitable, high-quality early childhood education in Australia. *Australasian Journal of Early Childhood*, 38(4), 92–98.

Ferguson, H., Bovaird, S., & Mueller, M. (2007). The impact of poverty on educational

outcomes for children. Paediatrics and child health, 12(8), 701-706.

- Fernández-Abascal, E. G. & Martín-Díaz, M. D. (2015). Dimensions of emotional intelligence related to physical and mental health and to health behaviors. *Frontiers in psychology*, 6, 317. https://doi.org/10.3389/fpsyg.2015.00317
- Field, F. (2010). *The Foundation Years: preventing poor children become poor adults*. Crown Copyright.
- Fitzgerald, L. (2020). Toddler Growth and Development.

https://www.verywellfamily.com/toddler-growth-and-development-4157378

- Fitzpatrick, C. (2014). Bridging the gap between advantaged and disadvantaged children: Why should we be concerned with executive functions in the South African context? *South African Journal of Childhood Education*, 4(1),156-166.
- Fletcher, M., & Dwyer, M. (2008). *A fair go for all children: Actions to address child poverty*. Children's Commissioner: Barnardos.
- Flouri, E., & Buchanan, A. (2003). The Role of Father Involvement and Mother Involvement in Adolescents' Psychological Well-being. *British Journal of Social Work, 33*, 399-406.
- Ford, S. (2019). Income as Incentive: An Examination of Money as a Motivator Among Top Tier Employees, *PM World Journal*, 8(2).
- Foster, P (2016). *The Importance of Professional Development for Early Childhood Educators*. Foster.edu
- Fourie, J.E. (2013). Early Childhood Education in South African Townships: Academics Accepting the Challenge to Empower Early Childhood Development Practitioners. *Journal of Social Sciences*. 36(1),
- Frances, R., Coughlan, M. & Cronin, P. (2009). Interviewing in qualitative research. International Journal of Therapy and Rehabilitation, 16(6), 309-314.
- Francis, D. and Webster, E. (2019) Poverty and Inequality in South Africa: Critical Reflections. Development Southern Africa, 36(6), 788-802.
- Furlong, M. & Quirk, M. (2011). The Relative Effects of Chronological Age on Hispanic Students' School Readiness and Grade 2 Academic Achievement, *Contemporary School Psychology*, 15, 81-92.
- Gallahue D. L. & Ozmun J. C. (2002). Motor Development: A theoretical model. Understanding motor development: infants, children, adolescents, adults. (5th ed.). McGraw-Hill.
- Garcia, C., Bearer, E.L., & Lerner, R.M. (Eds.). (2003). Nature and Nurture: The Complex

Interplay of Genetic and Environmental Influences on Human Behavior and Development (1st ed.). Psychology Press. https://doi.org/10.4324/9781410609830

- Garcia, M., Virata, G. & Dunkleberg, E. (2008). The State of Young Children in Sub-Saharan Africa. In Garcia, M., Pence, A., and Evans, J. (eds). *Africa's Future, Africa's Challenge*. The World Bank. pp.11-28.
- Garger, J. (2013). *Using the Case Study method in PhD Research*. http://www.brighthub.com/education/postgraduate/articles/77789.aspx
- General Household Survey (2015). Statistics South Africa.
- Germain, C. B. (1973). An Ecological Perspective in Casework Practice. *Social Casework*, 54(6), 323–330. https://doi.org/10.1177/104438947305400601
- Germain, C.B. (1976). Time: An ecological variable in social work practice. *Social Casework*, *57*, 419–426.
- Germaine, C. B. (1991). *Human behaviour in the social environment: An ecological view*. New Age.
- Gidion, H., (2020). The Importance of Measuring Fine Motor Skill in Early Children's
  Education, Advances in Social Science, *Education and Humanities Research* 426, 313-19.
- Gill T. (2019). Designing Cities for Outdoor Play.
- http://www.child-encyclopedia.com/outdoor-play/according-experts/designing-cities-outdoorplay
- Gillon, R. (2003). Ethics needs principles: four can encompass the rest and respect for autonomy should be "first among equals." *J Med Ethics*, 29, 307–312.
- Gnjatovic, D. (2015). Stories in different domains of child development. *Research in Pedagogy*. 37(22), 84-97.
- Goddard, N. (2012). Human Personality Development in Core Psychiatry (3rd Edition). Sage.
- Gold, R. L. (1958). Roles in sociological field observations. Social Forces, 36(3), 217–223.
- Goldhaber, D. E. (2000). *Theories of human development: Integrative perspectives*. Mayfield Publishers.
- Gonzalez, S. L., Alvarez, V. & Nelson, E. (2019). Do Fine and Gross Motor Skills Differentially Contribute to Language Outcomes? *Frontiers in Psychology*. 10, 2670.
- Gottlieb, G., Wahlsten, D., & Lickliter, R. (2006). The Significance of Biology for Human

Development: A Developmental Psychobiological Systems View. In R. M. Lerner & W. Damon (Eds.), *Handbook of child psychology: Theoretical models of human development* (pp. 210–257). John Wiley & Sons Inc.

- Graham, S. & Santangelo, T. (2012). A meta-analysis of the effectiveness of teaching handwriting. Presented at the Handwriting Summit, Washington, D.C. Administrative Issues Journal Education Practice and Research. (4)2.
- Grant, C. & Osanloo, A. (2015). Understanding, selecting, and integrating a theoretical framework in dissertation research: Developing a 'blueprint' for your "house". *Administrative Issues Journal*. 4(2).12-26.
- Grbich, C. (2010). Qualitative Data Analysis. In Researching Practice: A Discourse on Qualitative Methodologies. (2). 173-183.
- Greenbank, P. (2003). The Role of Values in Educational Research: The Case for Reflexivity. *British Educational Research Journal*. 29(6), 1-8.
- Griffin, C. (2004). *The advantages and limitations of qualitative research in psychology and education*. University of Bath.
- Griffore, R. J. & Phenice, L. A. (2016). Proximal processes and causality in human development. *European Journal of Educational and Development Psychology*, 4(1), 10-16.
- Grissmer, D., K. J. Grimm, S. M. Aiyer, W. M. Murrah, & Steele, J. S. (2010a). Fine motor skills and early comprehension of the world: Two new school readiness indicators. *Developmental Psychology*. 46(5).1008-1017.
- Grissmer, D., K. J. Grimm, S. M. Aiyer, W. M. Murrah & Steele, J. S. (2010b). New school readiness indicators. *Research Brief*. Charlottesville: University of Virginia, Centre for Advanced Study of Teaching and Learning.
- Gu, X., Chang, M. & Solmon, M.A. (2016). Physical Activity, Physical Fitness, and Healthrelated Quality of Life in School-aged Children. *Journal of Teaching in Physical Education*. 35(2). 1-13.
- Guba, E. G. & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin and Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105–117). Sage.
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. Educational Technology Research and Development, 29,75-91.

Guba, E. G. & Lincoln, Y. S. (1989). Fourth generation Evaluation. Sage.

- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K.Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105–117). Sage Publications, Inc.
- Guest, H. (2014). Maslow's hierarchy of needs- the sixth level. The Psychologist, 27, 982-983.
- Guhn, M. & Goelman, H. (2010). Bio ecological theory, early child development and the validation of the population-level early development instrument. *Social Indicators Research*, 103(2), 193-217.
- Haartsen, R., Jones, E. J. H. & Johnson, M. H. (2016). Human brain development over the early years. *Current Opinion in Behavioural Sciences*, 10, 149-154. https://doi.org/10.1016/j.cobeha.2016.05.015
- Haibach-Beach, P., Reid, G. & Collier, D. (2011). Motor learning and development. Champaign, IL. Human Kinetics.
- Han, W. (2008). The academic trajectories of children of immigrants and their school environments. *Developmental Psychology*, 44(6), 1572-1590.
- Hanapi, N, L. & Ahmad, S. S. (2016). A Review on Environmental Characteristic that Influence Children Physical Activities in Low Cost Housing. *Procedia - Social and Behavioral Sciences* 222, 19 – 27.
- Haney, T. J. (2007). "Broken windows" and self-esteem: Subjective understandings of neighbourhood poverty and disorder. *Social Science Research*, 36, 968994.
- Hanmer, L., Lensink, R., & White, H. (2010). Infant and child mortality in developing countries: Analysing the data for robust determinants. *The Journal of Development Studies*. 40(1). 101-118.
- Hapunda, G., Abubakar, A., & van de Vijver, F. (2017). Applying the Bioecological Model to Understand Factors Contributing to Psychosocial Well-being and Health Care of Children and Adolescents with Diabetes Mellitus. South African Journal of Diabetes and Vascular Diseases, 14, 11-17.
- Harding, T. S. & Whitehead, D. (2013). Analysing data in qualitative research. In Schneider, Z and Whitehead, (Eds). Nursing and Midwifery Research: Methods and Appraisal for Evidence-Based Practice. pp. 141-160. Elsevier
- Hardy, S., White, J. & Gray, R. (2015). *The Health Improvement Profile (HIP): A Manual to promote physical well-being in people with severe mental illness*. M & K Publishing.
- Harris, J. R. (1999). How to succeed in childhood. In S. J. Ceci & W. M. Williams (Eds.). The

nature-nurture debate: The essential readings (pp. 84-95). Blackwell Publishing.

- Harrison, H., Birks, M. Franklin, R. & Mills, J. (2017). Case Study Research: Foundations and Methodological Orientations. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 18(1), 19.
- Henning, E. (2004). Finding your way in qualitative research. Van Schaik.
- Hernandez, R., Bassett, S. M., Boughton, S. W., Schuette, S. A., Shiu, E. W. & Moskowitz, J. T. (2017). Psychological Well-Being and Physical Health: Associations, Mechanisms, and Future Directions. *SAGE Journals*, 10(1). 18-29.
- Herbst, A.J., Mafojane, T. & Newell, ML. Verbal autopsy-based cause-specific mortality trends in rural KwaZulu-Natal, South Africa, 2000-2009. (2011). *Population Health Metrics* 9, 47 (2011). https://doi.org/10.1186/1478-7954-9-47
- Hesketh, K. D., Tinkley, T. & Campbell, K. J. (2012). Children's physical activity and screen time: qualitative comparison of views of parents of infants and preschool children. *International Journal of Behavioural Nutrition and Physical Activity*. 9.152.
- Hestbaek, L., Andersen, S. T., Skovgaard, T., Olesen, L. G., Elmose, M., Bleses, D., Andersen,
  S. C. & Lauridsen, H. H. (2017). Influence of motor skills training on children's development evaluated in the Motor skills in PreSchool (MiPS) study-DK: study protocol for a randomized controlled trial, nested in a cohort study. *Trials*, *18*(1), 400.
- Hlalele, D (2012). Social Justice and Rural Education in South Africa. *Perspectives in Education*. 30(1). 111-118.
- Hoberman, A., Shaikh, N., Bhatnagar, S., Haralam, M. A., Kearney, D. H., Colborn, D. K., Kienholz, M. L., Wang, L., Bunker, C. H., Keren, R., Carpenter, M. A., Greenfield, S. P., Pohl, H. G., Mathews, R., Moxey-Mims, M., & Chesney, R. W. (2013). Factors that influence parental decisions to participate in clinical research: consenters vs nonconsenters. *JAMA pediatrics*, *167*(6), 561–566. https://doi.org/10.1001/jamapediatrics.2013.1050
- Hogan, J., Dolan, P. & Donnelly, P. (2009). Introduction, In J. Hogan, P. Dolan and P. Donnelly (eds). *Approaches to Qualitative Research: Theory and Its Practical Application*, pp. 1-18. Oak Tree Press.

Hollander, K., van der Zwaard, B. C., de Villiers, J. E, Braumann, K., Venter, R. & Zech, A.

(2017). The effects of being habitually barefoot on foot mechanics and motor performance in children and adolescents aged 6-18 years: study of protocol for a multicentre cross-sectional study. *Journal of Foot and Ankle Research*, 9(36), 1-9.

- Hong, J. S., Algood, C. L., Chiu, Y., & Lee, S. A. (2011). An Ecological Understanding of Kinship Foster Care in the United States. *Journal of Child and Family Studies*. 20. 863 -872.
- Horton, B. W. & Snyder, C.S. (2009) Wellness: Its Impact on Student Grades and Implications for Business, *Journal of Human Resources in Hospitality and Tourism.* 8(2). 215-233.
- Hottenrott, K., Ludyga, S., & Schulze, S. (2012). Effects of high intensity training and

continuous endurance training on aerobic capacity and body composition in recreationally active runners. *Journal of sports science & medicine*, 11(3), 483-488.

- Howell, K. E. (2013). *Empiricism, Positivism and Post-Positivism*. In: An Introduction to the *Philosophy of Methodology*. https://pdfs.semanticscholar.org
- Hutson, T., Cooper, S., & Talbert, T. (2011). Describing Connections between Science Content and Future Careers: Implementing Texas Curriculum for Rural At-Risk High School Students Using Purposefully-Designed Field Trips. *National Rural Education Association.* 33(1). 37-47.
- Hyett, N., Kenny, A., & Dickson-Swift, V. (2014). Methodology or method? A critical review of qualitative case study reports. *International Journal of Qualitative Studies on Health and Well-Being*, 9.
- Iacono, J. Brown, A. & Holtham, C. (2009). Research Methods a Case Example of Participant Observation. *The Electronic Journal of Business Research Methods*, 7(1), 39-46.
- Iqabul, J. (2007) Learning from a doctoral research project: Structure and content of a research proposal. *The Electronic Journal of Business Research Methods*, 5(1).11-20.
- Isaacs, J. & Magnuson, K. (2011). Income and Education as Predictor's of Children's School Readiness. The Brookings Institution.
- Isaacs, J. B. (2012). Starting School at a Disadvantage: The School Readiness of Poor Children. *Centre on Children and Families*. 1-22.
- James, K. H. & Engelhardt, L. (2015). The effects of handwriting on functional brain development in pre- literate children. *Trends in Neuroscience and Education*, 1(1). 32-42.

- Janse van Rensburg, O. (2015). The school readiness performance of a group of Grade R learners in primary schools in the Gauteng Province of South Africa, *South African Journal of Childhood Education*, 5(1), 106-124.
- Janus, M., & Gaskin, A. (2013). School Readiness. In A. C. Michalos (Ed.), Encyclopedia of quality of life research. Springer.
- Janus, M. & Duku, E. (2007). The Early Entry Gap: Socioeconomic, Family and Health Factors Associated with Children's School Readiness to Learn. *Early Education and Development*, 18(3), 375-403.
- Janus, M. (2007). "The Early Development Instrument: A Tool for Monitoring Children's Development and Readiness for School". In M. E. Young (Ed.), *Early child development* from measurement to action: A priority for growth and equity, pp. 141–155. Washington, D.C.: World Bank.
- Jencks, C. & Mayer, S. (1990). The social consequences of growing up in poor neighbourhood. In L. E. Lynn and M. F. H. McGeary (Eds.), *Inner-city poverty in the United States* (pp. 111-186). National Academy Press.
- Jong, Y. O. & Jung, C. K. (2015). The Development of Interview Techniques in Language Studies: Facilitating the Researchers' Views on Interactive Encounters. *Canadian Centre* of Science and Education. 8(7). 30-39.
- Jordan-Zachery, J. S. (2009). Making fathers: Black men's response to fatherhood initiatives. Journal of African American Studies, 13, 199-218.
- Joughin, C. (2019). Major Study Shows Poverty Directly Linked to Lack of School Readiness. First Five Years Fund. Report. *The American Academy of Pediatrics* (AAP). https://www.ffyf.org/major-study-shows-poverty-directly-linked-to-lack-of-schoolreadiness/
- Junior, P. H., Abib, G. & Hoppen, N. (2019). The Qualitative Report Validity in Qualitative Research, *A Processual Approach. Qualitative Report*, 24(1), 98-112.
- Kaakinen, J., Gedaly-Duff, V., Hanson, S. M. H., & Coehlo, D. P. (2010). *Family health care nursing. Theory, Practice, and Research.* FA Davis Co.
- Kabir, S. M. (2016). Methods of Data Collection. In *Basic Guidelines for Research: An Introductory Approach for All Disciplines*, Edition: First, Chapter: 9, Publisher: Book Zone Publication, pp.201-275.

Kaboob, F. (2001). Positivist and hermeneutic paradigms: A critical evaluation under the

*structure of scientific practice.* Retrieved 10 April 2020 from http://f.students.umkc.edu/fkfc8/PosHermSSP.htm

- Kagan, S. L. (1990). Readiness 2000: Rethinking rhetoric and responsibility. *Phi Delta Kappan*, 72(4), 272–279.
- Kagan, S. L. (1999). Cracking the readiness mystique. Young Children, 54(5), 2–3.
- Kamara, E. N., Kasanda, C. & Van Rooy, G. (2018). Provision of Integrated Early Childhood Development in Namibia: Are We on the Right Track? *Education Sciences*, 8. 117. doi:10.3390/educsci8030117
- Kanano, D. & Muniz, J. (2018). Writing the literature review for empirical papers. 28. Retrieved from http://dx.doi.org/10.1590/0103-6513.20170086
- Kartal, H., Balantekin, Y. & Bilgin, K. (2016). The Importance of Early Childhood Education and School Starting Age in the Reading-Writing Learning Process. *Participatory Educational Research*, 3(1), 79-101.
- Kashdan, T. B., Biswas-Diener, R., King, L. A. (2008). Reconsidering happiness: The costs of distinguishing between hedonics and eudaimonia. *The Journal of Positive Psychology*, 3(4), 219 – 233.
- Kaul, V. & Bhattacharjea, S. (2019). Early Childhood Education and School Readiness in India: Quality and Diversity. Springer.
- Kawulich, B. B. (2005). Participant Observation as a Data Collection Method. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 6(2),43.
- Kawulich, B. B. (2012). Doing Social Research: A global context, Chapter: Collecting data through observation, (Eds). C. Wagner, B. Kawulich, M. Garner, pp.150-160. McGraw Hill
- Kay, L. (2018). Bold Beginnings and the Rhetoric of 'School Readiness'. *Forum*, 60(3). 327-336 DOI: 10.15730/forum.2018.60.3.327
- Kenya Institute of Education (2008). https://worldcat.org/identities/lccn-n80005411
- Kernan & Devine (2010). Being Confined within? Constructions of the Good Childhood and Outdoor Play in Early Childhood Education and Care Settings in Ireland. *Children and Society*,24(5), 371-385.
- Keyes, C. L., Shmotkin, D. & Ryff, C. D. (2002). Optimising well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology*, 82(6), 1007-1022.

- Kharsany, A. B., Cawood, C., Khanyile, D., Grobler, A., Mckinnon, L. R., Samsunder, N., Frohlich, J. A., Abdool Karim, Q., Puren, A., Welte, A., George, G., Govender, K., Toledo, C., Chipeta, Z., Zembe, L., Glenshaw, M. T., Madurai, L., Deyde, V. M., & Bere, A. (2015). Strengthening HIV surveillance in the antiretroviral therapy era: rationale and design of a longitudinal study to monitor HIV prevalence and incidence in the uMgungundlovu District, KwaZulu-Natal, South Africa. *BMC public health*, *15*, 1149. https://doi.org/10.1186/s12889-015-2179-2
- Kharsany, A., Cawood, C., Khanyile, D., Lewis, L., Grobler, A., Puren, A., Govender, K., George, G., Beckett, S., Samsunder, N., Madurai, S., Toledo, C., Chipeta, Z., Glenshaw, M., Hersey, S., & Abdool Karim, Q. (2018). Community-based HIV prevalence in KwaZulu-Natal, South Africa: results of a cross-sectional household survey. *The lancet*. *HIV*, 5(8), e427–e437. https://doi.org/10.1016/S2352-3018(18)30104-8
- Khuluvhe, M., (2021). *Adult illiteracy in South Africa*, Department of Higher Education and Training, Pretoria.
- Khumalo, B. & Mji, A. (2014). Exploring educators' perceptions of the impact of poor infrastructure on learning and teaching in rural South African schools. *Mediterranean Journal of Social Sciences*, 5(20),1521-1532. doi: 10.5901/mjss. 2014.v5n20p1521
- Kiefer, R. A. (2008). An integrative review of the concept of well-being. *Holistic Nursing Practice*. 22(5). 244 252.
- Kihlstrom, J. F. & Park, L. (2018). Cognitive Psychology: Overview in Reference Module in Neuroscience and Biobehavioural Psychology.
- King, V. & Sobolewski, J. M. (2006). Non-resident Fathers' Contributions to Adolescent Well-Being. *Journal of Marriage and the Family*, 68(3), 537–557.
- Kitano, M. K. (2007). Poverty, diversity, and promise. In J. Van Tassel-Baska & T. Stambaugh (Eds.), *Overlooked gems: A national perspective on low-income promising learners* (pp. 37-41). National Association for Gifted Children.
- Kleppe, R., Melhuish, E. & Sandseter, E. B. H. (2017). Identifying and characterising risky play in the age one-to-three years. *European Early Childhood Education Research Journal*, 25(3), 370-385. DOI: http://dx.doi.org/10.1080/1350293X.2017.1308163
- Kloep, M., Hendry, L.B. & Saunders, D. (2009) A New Perspective on Human Development. Conference of the Journal of Arts and Sciences, 1(6), 332-343.
- Kokkalia, G. Drigas, A., Economou, A. & Roussos, P. (2019). School Readiness from

Kindergarten to Primary School. International Journal of Emerging Technologies in Learning (iJET), 14(11). 4-18.

- Korstjens, I. & Moser, A. (2018) Series: Practical guidance to qualitative research. Sampling, data collection and analysis, *European Journal of General Practice*, 24(1), 9-18.
- Korstjens, I. & Moser, A. (2018). Series: Practical guidance to qualitative research. Trustworthiness and publishing, *European Journal of General Practice*, 24(1), 120-124.
- Kotzé, J. (2015). The readiness of the South African education system for the pre-Grade R year. *South African Journal of Early Childhood Education*, 5(2). 1-27.
- Kowal, S., & O'Connell, D. C. (2014). Transcription as a crucial step of data analysis. In U. Flick (Ed.), The Sage handbook of qualitative data analysis (p. 64–79). Sage.
- Kralova, E. & Kolodziejski, M. (2016). Music and movement activities for preschool children as an incentive to foster relationships and the expression of movement. *Elementary Education in Theory and Practice*, 11(3), 185–205.
- Kumar, R. (2014). *Research methodology: a step-by-step guide for beginners*. Sage Publications.
- Kumar, R. (2019). *Research Methodology: A Step-by-Step Guide for Beginners*. (5<sup>th</sup> Edition).Sage Publications.
- Kumwenda, S., Msefula, C., Kadewa, W., Ngwira, B., & Morse, T. (2017). Estimating the Health Risk Associated with the Use of Ecological Sanitation Toilets in Malawi. *Journal of environmental and public health*, 2017, 3931802. https://doi.org/10.1155/2017/3931802
- Kuther, T. L. (2018). *Physical and Cognitive Development in Early Childhood. In Lifespan Development: Lives in Context.* Sage.
- Kwatubana, S. (2014), Perceptions of Up-scaling Community-based Sites to Provide Reception Classes in South Africa. *International Journal of Educational Sciences*, 7(3), 499-508.
- La Paro, K. M., Kraft-Sayre, M. & Pianta, R. C. (2003). Preschool to Kindergarten Transition Activities: Involvement and Satisfaction of Families and Teachers. *Journal of Research in Childhood Education*, 17(2), 147–158.
- LaBahn, J. (1995). Education and parental involvement in secondary schools: Problems, solutions and effects. Education Psychology Interactive. Valdosta State University.

Lamb, M. E. & Lewis, C. (2010). The role of the father in child Development (5th ed.) Wiley.

- Lang, S. N., Tolbert, A. R., Schoppe-Sullivan, S. J., & Bonomi, A. E. (2016). A cocaring framework for infants and toddlers: Applying a model of coparenting to parent–teacher relationships. *Early Childhood Research Quarterly*, 34, 40–52.
- Larsen, C., Walsh, C., Almond, N., & Myers, C. (2017). The "real value" of field trips in the early weeks of higher education: the student perspective. *Educational Studies*. 1-12.
- Larson, L.R., Green, G.T., & Cordell, H.K. (2011). Children's time outdoors: Results and implications of the National Kids Survey. *Journal of Park and Recreation Administration*, 29(2),1-20.
- Le Mottee, S. (2016). Overview of National Integrated ECD Draft Policy. Bridge CoP and Ilifa Labantwana.
- Lebrun-Harris L.A., Ghandour, R.M., Kogan, M.D., & Warren MD. (2022). Five-Year Trends in US Children's Health and Well-being, 2016-2020. JAMA Pediatrics. doi:10.1001/jamapediatrics.2022.0056
- Lee J. H. (2019). The effect of long-distance running on bone strength and bone biochemical markers. *Journal of Exercise Rehabilitation*, 15(1), 26–30. https://doi.org/10.12965/jer.1836564.282
- Lee, C.M.J. & Tham, K.W. (2021). Public toilets with insufficient ventilation present high cross infection risk. *Scientific Reports*, 11(1), 1-8.
- Lemaire, M.B., Amoah, D.F., Ntsiful, D.K., Micah, S.A. & Bonney, E.A. (2013). Early Childhood education in Ghana: Perceptions of Stakeholders in the Western Region. *Journal of Education and Practice*. 4 (9). 1-13.
- Lerner, R. (2005). Foreword: Urie Bronfenbrenner: Career contributions of the consummate developmental scientist. In U. Bronfenbrenner (Ed.). Making human beings human: Bioecological perspectives on human development (ix-xxvi). Thousand Oaks, CA: Sage.
- Lerner, R. M. & Callina, K. S. (2013). Relational developmental systems theories and the ecological validity of experimental designs: Commentary on Freund and Isaacowitz. *Human Development*, 56(6), 372–380.
- Leung, L. (2015). Validity, reliability, and generalisability in qualitative research. *Journal of Family Medicine and Primary Care*, *4*(3), 324–327.

Levanthal, T. & Brooks-Gunn, J. (2000). The neighbourhoods they live in: The effects of

neighbourhood residence on child and adolescent outcomes. *Psychological Bulletin*, 126(2), 309-337.

- Lewin, K.M. (2004). The pre-service training of teachers– does it meet it objectives and how can it be improved? (Background paper for Education for All Global Monitoring Report 2005. The Quality Imperative). https://unesdoc.unesco.org/ark:/48223/pf00001466 58.
- Lewis, C. (2014). Parental Engagement in Early Childhood Education and Care (ECEC): Fathers, low-income families and the move to a systemic analysis. Presentation at King Baudouin Foundation conference, Lisbon, January 2014. Retrieved from http://www.europe-kbf.eu/~/media/Europe/TFIEY/TFIEY-3\_InputPaper/Parentalengagement-in-ECEC.pdf

Lincoln, Y.S., and Guba, E. G. (1985). Naturalistic Inquiry. Sage Publications.

- Linneberg, M.S. & Korsgaard, S. (2019). Coding Qualitative Data: A Synthesis Guiding the Novice. *Qualitative Research Journal*.13-27.
- Lipscomb, S.T., Miao, A.J., Finders, J.K., Hatfield, B., Kothari, B.H. & Pears, B. (2019). Community-Level Social Determinants and Children's School Readiness. *Prevention Science*, 20, 468–477 https://doi.org/10.1007/s11121-019-01002-8
- Litchman, M. (2013). Qualitative research in education: A user guide. Sage.
- Longcamp, M., Zerbato-Poudou, M. T. & Velay, J. L. (2005). The influence of writing practice on letter recognition In Preschool children: A Comparison between handwriting and typing. *Acta Psychologica*, 119(1). 67–79.
- Lubans D.R., Morgan P.J., Cliff D. P., Barnett L.M. & Okely A.D. (2012). Fundamental movement skills in children and adolescents: review of associated health benefits. *Sports Med.* 40(12):1019–35.
- Lucas, P. & Schofield, G. (2010). Physical Activity in the Early Childhood Education Centre Environment. New Zealand Research in Early Childhood Education Journal. 13. 125-136.
- Luff, P. (2014). Teachers must be trained to help left-handed children. www.telegraph.co.uk.
- Lurio, J. G., Peay, H. L., & Mathews, K.D. (2015). Recognition of Motor Delay and Muscle Weakness in Children. *American Family Physician*. 91(1):38-44.
- Macey, W. H. & Fink, A.A. (2020). *Employee Surveys and Sensing: Challenges and Opportunities*. Oxford University Press.

- Mackenzie, N. & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research*, 16(2), 193-205.
- MacNaughton, G., Rolfe, S. A. & Siraj-Blatchford, I. (Eds.). (2001). *Doing early childhood research: International perspectives on theory and practice*. Open University Press.
- Magnusson, D. (2005). Individual development: A holistic, integrated model. In P. Moen, G. H. Elder& K. Luscher (Eds.), Examining lives in context: Perspectives on the ecology of human development (pp.19-60). American Psychological Association.
- Malik, F., & Marwaha, R. (2021). Cognitive Development. In *StatPearls*. StatPearls Publishing.
- Mandolesi, L., Polverino, A., Montuori, S., Foti, F., Ferraioli, G., Sorrentino, P. & Sorrentino, G. (2018). Effects of physical exercise on cognitive functioning and well-being: biological and psychological benefits. *Frontiers in Psychology*. 9(509). doi: 10.3389/fpsyg.2018.00509
- Manferdelli, G., La Torre, A. & Codella, R. (2019). Outdoor physical activity bears multiple benefits to health and society. *The Journal of sports medicine and physical fitness*, 59(5), 868-879. https://doi.org/10.23736/S0022-4707.18.08771-6

Mapcarta.com (March, 20, 2022) https://mapcarta.com/South\_Africa

- Marais, P. & Meier, C. (2010). Disruptive behaviour in the Foundation Phase of schooling. *South African Journal of Education*, 30, 41-57.
- Maree, K. (2016). First steps in research (2nd ed.). Van Schaik.
- Markotić, V., Pokrajčić, V., Babić, M., Radančević, D., Grle, M., Miljko, M., Kosović, V., Jurić, I. & Karlović Vidaković, M. (2020). The Positive Effects of Running on Mental Health. *Psychiatria Danubina*, 32(2), 233-235.
- Marshall, C. & Rossman, G.B. (2006). Designing qualitative research. Sage.
- Martin R., & Murtagh, E.M. (2017). Effect of active lessons on physical activity, academic, and health outcomes: a systematic review. *Res Q Exerc Sport*, 88(2):149–168.
- Martin, T., Arnal P.J., Hoffman, M.D. & Millet GY (2018) Sleep habits and strategies of

ultramarathon runners. *PLoS ONE* 13(5): e0194705. https://doi.org/10.1371/journal.pone.0194705

- Martínez-Mesa, J., González-Chica, D. A., Duquia, R. P., Bonamigo, R. R., and Bastos, J. L. (2016). Sampling: how to select participants in my research study? *Anais brasileiros de dermatologia*, 91(3), 326–330.
- Mashburn, A. J., Pianta, R.C., Hambre, B. K., Downer, J. T., Barbari, O. A., Bryant, D., Burchinal, M., Early, D.M., & Hoews, C. (2008). Measures of Classroom Quality in Prekindergarten and Children's Development of Academic, Language, and Social Skills. Society for Research in Child Development. 79(3). 732-749.
- Mashburn, A.J. & Pianta, R.C. (2006). Social relationships and school readiness. *Early Education and* Development. 17(1).151-176.
- Maslow, A. (1943). A theory of human motivation. Psychological Review, 50, 370-396. http://psychclassics.yorku.ca/Maslow/motivation.htm
- Masten, A. S. & Cicchetti, D. (2010). Developmental cascades. *Development and Psychopathology*. 22(3):491–495.
- Matsuda, S., Kasuga, K., Hanai, T., Demura, T., & Komura, K. (2016). The effect of the

kindergarten barefoot policy on preschool children's toes. Journal of Physiological Anthropology, 36, (1),1-7.

- Maturity and e-Readiness Assessment Report. Prepared for the Gauteng Department of Education (GDE). 30 June 2019.
- Maxwell, J. A. (2012). Qualitative Research Design: An Interactive Approach (Applied Social Research Methods). 3rd. ed. SAGE.
- May, C. R., & Campbell, R. M. (1981). Readiness for learning: Assumptions and realities. *Theory into Practice*, 20(2), 130–134.
- Mazurek M. B., & Neale, S. (2018). Wellness 101: 9 dimensions of wellness. *American Nurse Today*, 13(1), 10–11.
- Mbarathi, N., Mthembu, M.E. & Diga, K., 2016, *Early childhood development and South Africa: A literature review.* https://researchspace.ukzn.ac.za/bitstream/handle/10413/13338/Early%20Childhood %20Development\_2016.pdf?sequence=3&isAllowed=y.
- Mbeki erken regering se beplanning is nie op pyl [Mbeki admits that the governments' planning is not on schedule]. (2008, 9 February). *Beeld*.
- Mbude, N. (2021). Update on Early Childhood Development (ECD) Function Shift.

https://www.eccurriculum.co.za/Circulars/2021-Circulars.pdf

McCombes, S. (2019). How to write a research methodology. www.scribbr.com

- McLean, S., & McDougall, S. (2014). Fetal alcohol spectrum disorders: Current issues in awareness, prevention and intervention (CFCA Paper 29). Australian Institute for Family Studies.
- McLean, S., McDougall, S., & Russell, V. (2014). Supporting children living with FASD: practice principles (CFCA Practitioner Resource). Melbourne: Australian Institute for Family Studies.

McLeod, S. A. (2014). The interview method. Simply Psychology. Retrieved from

https://www.simplypsychology.org/interviews.html

McLeod, S. A. (2017). Developmental psychology. Simply Psychology. Retrieved from

https://www.simplypsychology.org/developmental-psychology.html

- McLeod, S. A. (2019). *Sampling methods*. Simply Psychology. https://www.simplypsychology.org/sampling.html
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, 53(2), 185-204.
- McMaster, E. & Roberts, T. (2016) Handwriting in 2015: A main occupation for primary school–aged children in the classroom?, *Journal of Occupational Therapy, Schools, & Early Intervention, 9*(1), 38-50. https://doi.org/10.1080/19411243.2016.1141084
- McMillan, J.H. & Schumacher, S. (2001). *Research in education: A conceptual introduction* (5th ed.). Addison-Wesley Longman.
- Mejia-Pailles, G., Berrington, A., McGrath, N., & Hosegood, V. (2020). Trends in the prevalence and incidence of orphanhood in children and adolescents <20 years in rural KwaZulu-Natal South Africa, 2000-2014. *PloS one*, 15(11), e0238563. https://doi.org/10.1371/journal.pone.0238563
- Melnyk, B. M. (2018). Intellectual Well-being. American Nurse Today. 13(5). 24-25.
- Meltzoff, A. N., & Williamson, R. A. (2017). Imitation and modeling. Reference Module in Neuroscience Biobehavioural Psychology. *Mental Health Journal*. 25(5). 440-452.
- Merriam, S. B. (2007). Qualitative research and case study applications in education Revised

and Expanded from Case Study Research in Education. (2nd. Ed). Jossey-Bass.

Merz, E.M., Consedine, N. S., Schulze, H.-J., & Schuengel, C. (2009). Well-being of adult

children and ageing parents: Associations with intergenerational support and relationship quality. *Ageing & Society*. 29(5). 783 - 802.

- Mihai, M; Titan, E., & Todose, D. Education and Poverty. *Procedia Economics and Finance*.32. 855-860.
- Miles, M. B. Huberman, A. M., & Saldaña, J. (2014). Qualitative Data Analysis. A Methods Sourcebook. Sage Publications.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2<sup>nd</sup> ed.). Sage Publications, Inc.
- Miller, T., & Boulton, M. (2007). Changing constructions of informed consent: Qualitative research and complex social worlds. *Social Science and Medicine*. 65. 2199 2211.
- Mills, A. J., Durepos, G., & Wiebe, E. (2010). Encyclopedia of Case Study Research. SAGE.
- Ministry of Women and Children Affairs: https://www.internationaldisabilityalliance.org/stakeholder/ghana-ministry-genderchildren-and-social-protection
- Mintzberg, H. (2009). Managing. Berret-Koehler Publishers, Inc.
- Miquelote, A. F., Santos, D. C. C., Tamplain, P., & Montebelo, M. I. (2012). Effect of the home environment on motor and cognitive behaviour of infants. *Infant Behaviour and Development*. 35(3), 329-34.
- Moen, P., Elder, G. H., & Luscher, K. (Eds.), Examining lives in context: *Perspectives on the ecology of human development*, 101-139
- Mohajan, H. K. (2017). Two Criteria for Good Measurements in Research: Validity and Reliability. *Annals of Spiru Haret University*. 17. 4. 59-82.
- Mohajan, H. K. (2018). Qualitative Research Methodology in Social Sciences and Related Subjects. *Journal of Economic Development, Environment and People*. 7(1), 23-48.
- Mokone, J. M. (2006). Challenges Experienced by Grandparents Raising Grandchildren: An Exploratory Study. *Social Work*, 42(2), 187-200. https://doi.org/10.15270/42-2-311
- Montoro-Rodriguez, J., Hayslip, B. (2019). The impact of a goal-setting intervention with custodial grandmothers: A demonstration project. GrandFamilies: *The Contemporary Journal of Research, Practice and Policy*, 5 (2), 25-41. https://scholarworks.wmich.edu/grandfamilies/vol5/iss2/6

- Mönks, F., & Mason, E.J. (1993). Developmental theories and giftedness. In K.E. Heller, F.J.
  Moon, S. M., Jurich, J. A., & Feldhusen, J. F. (1998). Families of gifted children: Cradles of development. In R. C. Friedman & K. B. Rogers (Eds.), *Talent in context* (pp.81-99). American Psychological Association.
- Mönks, F. & Mason, E.J. (1993). Developmental theories and giftedness. In K.E. Heller, F.J.
   Mönks & A. H. Passow (Eds). *International Handbook of Research and Development of Giftedness and Talent*. (pp.89-101). Pergamon Press Ltd.
- Mönks & A.H. Passow (Eds.), International Handbook of Research and Development of Giftedness and Talent, (pp.89-101). Pergamon Press.
- Moore, R. & Cosco, N. (2019). Early Childhood Outdoor Play and Learning Spaces
   (ECOPALS): Achieving Design Quality. In: Tremblay RE, Boivin M, Peters RDeV, eds.
   Brussoni M, topic ed. http://www.child-encyclopedia.com/outdoorplay/according-experts/early-childhood-outdoor-play-and-learning-spaces-ecopals-achieving.
- Morgan, A. & Allen, F. C (2005). EDUCATION Getting Ethics Committee Approval for Research: A Beginners Guide. *Australasian Journal of Paramedicine*. 3(3).
- Morrison, F. J., & Cooney, R. R. (2002). Parenting and academic achievement: Multiple paths to early literacy. In J. G. Borkowski, S. L. Ramey, & M. Bristol-Power (Eds.), *Parenting* and the child's world: Influences on academic, intellectual, and social-emotional development (pp. 141–160). Lawrence Erlbaum Associates Publishers.
- Morse, J., Barrett, M., & Olsen, K. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, 1(1), 1-22.
- Moshman, D. (2005). Tabula rasa. *Educational Psychology Papers and Publications*. 115. https://digitalcommons.unl.edu/edpsychpapers/115
- Mthethwa, N. I. (2018). Evaluating water conservation and water demand management in an industrialised city: a case study of the City of uMhlathuze in Richards Bay. [Master's Thesis, University of Cape Town]. http://hdl.handle.net/11427/27976
- Mueller, A. E., & Segal, D. L. (2015). Structured versus Semi structured versus Unstructured Interviews. In book: The Encyclopedia of Clinical Psychology First Edition. Edited by R. L. Cautin and S. O. Lilienfeld.
- Munnik, E., & Smith, M., (2019). 'Contextualising school readiness in South Africa:
   Stakeholders' perspectives', South African Journal of Childhood Education 9(1), a680.

Murphy, M. (2014). What are the benefits and drawbacks of case study research? http://socialtheoryapplied.com/2014/05/24/benefits-drawbacks-casestudy-research/

- Mutodi, P., & Hlanganiphani, N. (2014). The Impact of Parental Involvement on Student Performance: A Case Study of a South African Secondary School. *Mediterranean Journal of Social Sciences*. 5, 279-289.
- Naderifar, M., Goli, H., & Ghaljae, F. (2017). Snowball Sampling: A Purposeful Method of Sampling in Qualitative Research. *Strides in Development of Medical Education*. 14(3).
  1-6.
- Nathane-Taulela, M. & Nduna, M. (2014). Young women's experiences following discovering a biological father in Mpumalanga Province, South Africa. *The Open Family Studies Journal*, 6(1):62–68. https/doi.org/10.2174/1874922401406010062
- National Association for the Education of Young Children, National Association of Child Care Resource & Referral Agencies. (2011).,https://www.naeyc.org/
- National Development Agency (NDA) Report. 2018/2019. https://www.nda.org.za/publication/annual-report-2018-2019
- National Development Plan. (2012). Republic of South Africa. National Education Press. https://www.gov.za/issues/national-development-plan-2030
- National Planning Commission. (2013). Republic of South Africa. https://www.nationalplanningcommission.org.za/
- Naz, A., Rehman, R., Katpar, S., & Hussain, M. (2014). Intellectual wellness awareness: A neglected area in medical universities of Pakistan. *Journal of Pakistan Medical Association.* 64(9). 993-997.
- Nduna, M., & Jewkes, R. (2012). Disempowerment and psychological distress in the lives of young people in Eastern Cape, South Africa. *Journal of Child and Family Studies*, 21(6), 1018-1027.
- Nel, H. (2018). The Nature and Elements of Research Paradigms: Interpretivism. https://www.intgrty.co.za/2018/09/17/the-nature-and-elements-of-research-paradigmsinterpretivism/
- Neuman, W.L. (2000). *Social Research Methods: Qualitative and Quantitative Approaches* (4<sup>th</sup> Ed.), Allyn and Bacon.
- Newland, L.A. (2015). Family well-being, parenting, and child well-being: Pathways to healthy adjustment. *Clinical Psychologist*. 19(1). 3-14.

News24. (2021). ECD moves with Basic Education. News24. 18 November.

- Newson, A. J., & Lipworth, W. (2015). Why should ethics approval be required prior?
  to publication of health promotion research? *Health Promotion Journal of Australia*, 26, 170-175.
- Ngure, F. M., Humphrey, J. H., Mbuya, M. N., Majo, F., Mutasa, K., Govha, M., Mazarura, E., Chasekwa, B., Prendergast, A. J., Curtis, V., Boor, K. J., & Stoltzfus, R. J. (2013). Formative research on hygiene behaviors and geophagy among infants and young children and implications of exposure to fecal bacteria. *The American journal of tropical medicine and hygiene*, 89(4), 709–716. https://doi.org/10.4269/ajtmh.12-0568
- Nightingale, R., Sumner, E., Prunty, M., & Barnett, A. L. (2022). Handwriting and typing: Occupational therapy practice when supporting adolescents with handwriting difficulties. *British Journal of Occupational Therapy*. https://doi.org/10.1177/03080226221097314
- Nijhawan, L. P., Janodia, M. D., Muddukrishna, B. S., Bhat, K. M., Bairy, K. L., Udupa, N., & Musmade, P. B. (2013). Informed consent: Issues and challenges. *Journal of advanced pharmaceutical technology & research*, 4(3), 134–140. https://doi.org/10.4103/2231-4040.116779
- Nikken, P. (2019). Parents' Instrumental use of Media in Childrearing: Relationships with Confidence in Parenting, and Health and Conduct Problems in Children. *Journal of Child and Family Studies*. 28, 531–546.
- Nitecki, E. (2015). Integrated School-Family Partnerships in Preschool: Building Quality Involvement Through Multidimensional Relationships. *School Community Journal*. 25(2). 195-219.
- Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence-Based Nursing*, 18, 34-35.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 16, 1-13.
- Noyes, J., Booth, A., Moore, G., Flemming, K., Tunçalp, Ö., & Shakibazadeh, E. (2019).

Synthesising quantitative and qualitative evidence to inform guidelines on complex interventions: clarifying the purposes, designs and outlining some methods. *BMJ global health*, 4(1). e000893. https://doi.org/10.1136/bmjgh-2018-000893

- Ntekane, A. (2018). Parental involvement in education. *Research Gate Journal*. https://DOI: 10.13140/RG.2.2.36330.21440.
- Nutbrown, C (2012). Foundations for quality: The independent review of early Education and childcare qualifications. *Fisher Education Act*.
- O'Brien, M., & Wall, K. (2017). Fathers on Leave Alone: Setting the Scene. In: O'Brien M., & Wall, K. (eds) Comparative Perspectives on Work-Life Balance and Gender Equality. Life Course Research and Social Policies, (6). Springer, Cham. https://doi.org/10.1007/978-3-319-42970-0\_1
- O'Donoghue, K., & Maidment, J. (2005). The Ecological Systems Metaphor in Australasia. *Social Work Theories in Action.* 32-49.
- Obradović, J., Sulik, M. J., & Shaffer, A. (2021). Learning to let go: Parental over-engagement predicts poorer self-regulation in kindergartners. *Journal of Family Psychology*, 35(8), 1160–1170. https://doi.org/10.1037/fam0000838
- Ochieng J. (2012). Value and importance of informed consent to researchers at Makerere University. *Annals of Tropical Medicine and Public Health*. 5,16-9
- Oja L, Jürimäe T. Physical Activity, Motor Ability, and School Readiness of 6-Yr.-Old Children. (2002). *Perceptual and Motor Skills*. (2),407-415.
- Oke, B. E. (2016). Influence of early childhood instructional supervision on caregivers' effectiveness in Federal Capital Territory centres, Abuja Nigeria. *International Journal* for Cross-Disciplinary Subjects in Education, 7(1), 2682-2692.
- Okeyo, A. P., Seekoe, E., de Villiers, A., Faber, M., Nel, J. H., & Steyn, N. P. (2020). The Food and Nutrition Environment at Secondary Schools in the Eastern Cape, South Africa as Reported by Learners. *International Journal of Environmental Research and Public Health*, 17, 1-18.
- Olszewski-Kubilius, P. (2008). The role of the family in talent development. In S.I. Pfeiffer (Ed.), Handbook of giftedness in children: Psycho-educational theory, research, and best practices (pp.53-70). Springer Science and Business Media, LLC.

- Oltmann, S. M. (2016). Qualitative Interviews: A Methodological Discussion of the Interviewer and Respondent Contexts. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 17(2),15.
- Onwuegbuzie, A. J., & Collins, K. M. (2007). A Typology of Mixed Methods Sampling Designs in Social Science Research. *The Qualitative Report*, 12(2), 281-316.
- Oranga, J., Obuba, E. & Nyakundi, E. (2020) Education as an Instrument of Poverty Eradication in Kenya: Successes and Challenges. *Open Journal of Social Sciences*, 8, 410-424. doi: 10.4236/jss.2020.89031
- Organisation for Economic Co-operation and Development (OECD) *Teaching and Learning International Survey* (TALIS, 2009)
- Ortlipp, M., Arthur, L. & Woodrow, C. (2011). Discourses of the Early Years Learning Framework: Constructing the Early Childhood Professional. *Contemporary Issues in Early Childhood, 12*(1), 56. https// doi.org/10.2304/ciec.2011.12.1.56
- Ostrosky, M. M., Yang, H., Stalega, M., Favazza, P. C. & Mc Laughlin, K. (2018). Let's get moving: Using Children's Literature to Support Physical Activity and Readiness Skills. *Palaestra*, 32 (1). 39-44.
- Oswald, F., Campbell, J., Williamson, C., Richards, J., & Kelly, P. (2020). A Scoping Review of the Relationship between Running and Mental Health. *International journal of environmental research and public health*, 17(21), 8059. https://doi.org/10.3390/ijerph17218059
- Owen, G. T. (2014). Qualitative Methods in Higher Education Policy Analysis: Using Interviews and Document Analysis. *The Qualitative Report*, 19(26), 1-19.
- Paat, Y. (2013). Working with immigrant children and their families: An application of Bronfenbrenner's ecological systems theory. *Journal of Human Behaviour in the Social Environment*, 23(8), 954-966.
- Pable, J. (2013). Case study methodology and homeless research. *Journal of Systemics*, 11(7), 70-73.
- Packer, M. (2017). *Child Development: Understanding a Cultural Perspective*. SAGE Publications.
- Palaganas, E. C., Sanchez, M. C., Molintas, M. P., & Caricativo, R. D. (2017). Reflexivity in Qualitative Research: A Journey of Learning. *The Qualitative Report*, 22 (2), 426-438.

- Palmer, R., Wedgwood, R., & Hayman, R. (2007). Educating out of Poverty? A Synthesis Report on Ghana, India, Kenya, Rwanda, Tanzania and South Africa. Centre for African Studies. University of Edinburgh.
- Pandor, N. Address by the Minister of Education, Ms Naledi Pandor, MP. Presented at the Ntataise Conference on Early Childhood Development, Riversdale Hotel and Conference Centre.
- Pannilage, U. (2017). Impact of Family on Children's Well-being. Journal of Sociology and Social Work, 5 (1,) 149-158. https//DOI: 10.15640/jssw. v5n1a15
- Paquette, D. & Ryan, J. (2001). Bronfenbrenner's Ecological Systems Theory. http://nl.edu/paquetteryanwebquest.pdf
- Parenting Matters: Supporting Parents of Children Ages 0-8. (2016). National Academies of Sciences, Engineering and Medicine. The National Academies Press. https://pubmed.ncbi.nlm.nih.gov/27997088/
- Pascal, C., Bertram, T., & Cole- Albäck, A. (2017). The Hundred Review: What research tells us about effective pedagogic practice and children's outcomes in the Reception Year. http://earlyexcellence.com/wpcontent/uploads/2017/05/10\_100
- Patel, M. & Patel, N. (2019). Exploring research methodology: review article. *International Journal of Research and Review*, 6(3),48-55.
- Patton, M. Q. (2002). Two Decades of Developments in Qualitative Inquiry: A Personal, Experiential Perspective. *Qualitative Social Work*.1(3), 261-283.
- Patton, M. Q. (2014). *Qualitative Research and Evaluation Methods: Integrating Theory and Practice.* (4th. Ed). SAGE.
- Pedisic, Z., Shrestha, N., Kovalchik, S., Stamatakis, E., Liangruenrom, N., Grgic, J., Titze, S., Biddle, S. J., Bauman, A. E., & Oja, P. (2020). Is running associated with a lower risk of all-cause, cardiovascular and cancer mortality, and is the more the better? A systematic review and meta-analysis. *British journal of sports medicine*, 54(15), 898–905. https://doi.org/10.1136/bjsports-2018-100493
- Pekdoğan, E. & Akgül, S. (2017). Preschool Children's School Readiness. International Education Studies. 10(1). 144-154.

- Pelzang, R. & Hutchinson, A. M. (2017). Establishing Cultural Integrity in Qualitative Research: Reflections from a Cross-Cultural Study. *International Journal of Qualitative Methods*.17, 1–9.
- Perry, H. M. (2010). Implementation of the National Curriculum for Physical Development in the Reception Year. [M.Ed. Thesis]. University of Pretoria.
- Pesau, H.G., Widyorini, E., & Sumijati, S. (2020). Self-Care Skills of Children with Moderate Intellectual Disability. *Journal of Health Promotion and Behaviour*, 5(1), 43-49. https://doi.org/10.26911/thejhpb.2020/.05.01.06
- Peterson, N., & Petker, G. (2012). *Foundation Phase Teaching as a Career Choice: Building a Nation where it is needed.* Taylor and Francis.
- Pickering, A. J., Julian, T. R., Marks, S. J., Mattioli, M. C., Boehm, A. B., Schwab, K. J., & Davis, J. (2012). Fecal contamination and diarrheal pathogens on surfaces and in soils among Tanzanian households with and without improved sanitation. *Environmental Science and Technology*, 46(11), 5736-5743. https://doi.org/10.1021/es300022c
- Phala, T.A. & Hugo, A. (2022). Difficulties in teaching Grade 3 learners with reading problems in full-service schools in South Africa, *African Journal of Disability* 11(0), a906. https://doi.org/10.4102/ajod.v11i0.906
- Pham, L. (2018). A Review of key paradigms: positivism, interpretivism and critical inquiry. https//DOI:10.13140/RG.2.2.13995.54569
- Phatudi, N. C. (2007). A Study of Transition from Preschool and Home Contexts to Grade 1 in a Developing Country. [Unpublished Doctoral Dissertation].
- Pianta, R. (2008). Parental conceptions of school readiness: Relation to ethnicity, socioeconomic status, and children's skills. *Early Education and Development*. 19(5), 671-701.
- Pianta, R. C., Cox, M. J., & Snow, K. L. (2007). School Readiness and the Transition to Kindergarten in the Era of Accountability, *NHSA Dialog*, 11:1, 67-68.
- Pica, R. (2013). *Experience in movement & music birth to age eight* (5th ed.). Cengage Learning.
- Plato, (1975). [Ed] Republic, Athens: Papyros (in Greek).

- Plotkin, H. (2001). Evolution of Intelligence in International Encyclopedia of the Social and Behavioral Sciences.
- Plumper, T., Troeger, V. E. & Neumayer, E. (2019). Case selection and causal inferences in qualitative comparative research. 14(7). https://doi.org/10.1371/journal. pone.0219727
- Polit, D. F., & Beck, C. T. (2010). Generalisation in Quantitative and Qualitative Research: Myths and Strategies. *International Journal of Nursing Studies*. 47. 1451-1458.
- Polit, D. F., & Beck, C. T. (2012). *Nursing Research: Principles and Methods*. Lippincott Williams and Wilkins.
- Pollard, E. L., & Lee, P.D. (2003). A Systematic Review of Literature: *Social Indicators Research*, 61(1):59-78.
- Popov, A., Parker, L. & Seath, D. (2018). Oxford IB Diploma Programme: Psychology Course Companion. Oxford University Press.
- Posel, D. (2010). Households and labour migration in post-apartheid South Africa. *Journal of Studies on the Economy and Econometrics*, 34(3), 129-141.
- Powell, J. P. (2010). The Messiness of Readiness. Kappan Magazine. 92(3). 26-28.
- Prinsloo, M. & Reid, M. (2015). Experiences of parents regarding a school-readiness intervention for pre-school children facilitated by Community Health Nursing students. *International Journal of Africa Nursing Sciences*. 3(C).
- Pulla, V. & Carter, E. (2018). Employing Interpretivism in Social Work Research. International Journal of Social Work and Human Services, 6(1). 9-14.
- Råheim, M., Magnussen, L. H., Sekse, R. J., Lunde, Å., Jacobsen, T., & Blystad, A. (2016). Researcher-researched relationship in qualitative research: Shifts in positions and researcher vulnerability. *International Journal of Qualitative Studies on Health and wellbeing*, https://doi.org/10.3402/qhw.v11.30996
- Rahmawati, A., Tairas, M. M. W., & Nawangsari, N.A.F. (2018). Children's School Readiness Based on Teachers' and Parents' Perceptions. *International Journal of Pedagogy and Teacher Education*. 2(1). 201-211.
- Rathus, S.A. (2006). Childhood and adolescence, Thomson Wadsworth.

Reetu, C., Renu, G., & Ardash, S. (2017). Quality Early Childhood Care and Education in

India: Initiatives, Practice, Challenges and Enablers. *Asia-Pacific Journal of Research in Early Childhood*. 11(1). 41-67.

- Rehman, A. A. & Alharthi, K. (2016). An introduction to research paradigms. *International Journal of Educational Investigations*. 8(3). 51-59.
- Reid, A., Brown, J.M., Smith, J.M., Cope, A. C. & Jamieson, S. (2018). Ethical dilemmas and reflexivity in qualitative research. *Perspectives on Medical Education*. 7, 69 75.
- Richters, J. E. (1997). The Hubble hypothesis and the developmentalist's dilemma. *Development and Psychopathology*, 9, 193–229.
- Ridder, H. (2017). *The theory contribution of case study research designs*. Business Research. https//DOI:10.1007/s40685-017-0045-z
- Ridley, D. (2012). *The Literature Review. A Step-by-Step Guide for Students*. SAGE Publications
- Rimm-Kaufman S. (2017) School Transition and School Readiness: An Outcome of Early Childhood Development. In: Tremblay RE, Boivin M, Peters RDeV, eds. *Encyclopedia* on Early Childhood Development. http://www.child-encyclopedia.com/schoolreadiness/according-experts/school-transition-and-school-readiness-outcome-earlychildhood
- Richter, L. M. (2004). Poverty, underdevelopment, and infant mental health. Infant Mental Health Journal: Official Publication of The World Association for Infant Mental Health, 25(5), 440-452.
- Ritchie, J., Lewis, J., Nicholls, C. M., and Ormston, R. (2013). *Qualitative research practice: A guide for social science students and researchers.* Sage.
- Roberts, G. Lim, J., Doyle, L. W. & Anderson, P. J. (2011). High Rates of School Readiness Difficulties at 5 Years of Age in Very Preterm Infants Compared with Term Controls. *Journal of Developmental and Behavioural Pediatrics*, 32(2). 117-124.
- Roberts, P. C. (2016). Place, Rural Education and Social Justice: A Study of Rural Teaching and Curriculum Politics. [PhD Thesis. Charles Sturt University].
- Robinson, E. L., Wadsworth, D. D. & Peoples, C. M. (2012). Correlates of School-Day Physical Activity in Preschool Students. *Research Quarterly for Exercise and Sport*. 83(1). 20-26.
- Rogers, Y., Sharply, H. & Preece, J. (2011). Interaction Design. (3rd Edition). Wiley.
- Rogoff, B. (2003). The cultural nature of human development. Oxford University Press.

- Rosa, M. & Tudge, J. (2013). Urie Bronfenbrenner's Theory of Human Development: Its Evolution from Ecology to Bioecology. *Journal of Family Theory and Review*. 5(4). 243-258.
- Rose, T. L.; Rouhani, P., & Fischer, K. W. (2013). The Science of the Individual. *Mind, Brain and Education*. 7(3). 152-158.
- Rosenbaum, D. A. (2005). The Cinderella of psychology: the neglect of motor control in the science of mental life and behaviour. *Am. Psychol.* 60, 308–317.
- Rudolph, Millei, & Alasuutari, (2019). Data Practices and Inequality in South African EarlyChildhood Development Policy: Technocratic Management Versus SocialTransformation. South African Journal of Childhood Education. 9(1).
- Rule, P., & John, V. M. (2011). Your Guide to Case Study Research. Van Schaik.
- Ryff, C. D., Singer, B. H. & Love, G. D. (2004). Positive health: Connecting well-being with biology. Philosophical Transactions of the Royal Society of London. Series B: *Biological Sciences*. 359(1449), 1383–1394.
- Salama-Younes, M. (2011). Positive Mental Health, Subjective Vitality and Satisfaction with Life for French Physical Education Students. *World Journal of Sport Sciences*. 4 (2). 90-97.
- Salkind, N. J. (2010). *Encyclopedia of research design* (Vols. 1-0). SAGE Publications, Inc. https//doi: 10.4135/9781412961288
- Salman, M. S., & Tsai, P. (2016). The Role of the Pediatric Cerebellum in Motor Functions, Cognition, and Behavior: A Clinical Perspective. *Neuroimaging clinics of North America*, 26(3), 317–329. https://doi.org/10.1016/j.nic.2016.03.003
- Sampson, D., Hertlein, K. (2015). The experience of grandparents raising grandchildren. *GrandFamilies: The Contemporary Journal of Research, Practice and Policy*, 2(1). https://scholarworks.wmich.edu/grandfamilies/vol2/iss1/4
- Sampson, R. J., Morenoff, J. D., and Gannon-Rowley, T. (2002). Assessing "neighbourhood effects": Social processes and new directions in research. *Annual Review of Sociology*, 28, 443-478.
- Samuels, M., Taylor, S., Shepherd, D., Van der Berg, S., Jacob, C., Deliwe, C.N. et al., 2015,'Reflecting on an impact evaluation of the Grade R programme: Method, Results and Policy Responses'. *African Evaluation Journal*. 3(1).1-10.
- Sandseter, E. B. H. (2010). Scaryfunny: A qualitative study of risky play among preschool children. Trondheim: Norwegian University of Science and Technology.

Santrock, J. W. (2008). Essentials of life-span development. McGraw-Hill.

- Sapungan, G. M., & Sapungan, R. M. (2014). Parental Involvement in Child's Education: Importance Barriers and Benefits. Asian Journal of Management Sciences & Education.3(2). 42-48.
- SAQA (South African Qualifications Authority). (2007). The Uptake and Impact of Qualifications and Unit Standards in the Sub-field: Early Childhood Development. SAQA Report. Pretoria: SAQA.
- Saracho, O. (2015). Contemporary Perspectives on Research in Assessment and Evaluation in Early Childhood Education. Information Age publishing.
- Sardokie, A. S., & Adams, S. (2020). Electricity access and income inequality in South Africa: Evidence from Bayesian and NARDL analyses. Energy Strategy Reviews. https://doi.org/10.1016/j.esr.2020.100480
- Sarniak, R. (2015). 9 types of research bias and how to avoid them. https://www.quirks.com/articles/9-types-of-research-bias-and-how-to-avoid-them
- Savahl, S., Casas, F., & Adams, S. (2017). Children's subjective well-being: Multi-group analysis among a sample of children from two socio-economic status groups in the Western Cape, South Africa. *Child Indicators Research*, 10: 473–488. http://dx.doi.org/10.1007/s12187-016-9392-0
- Schlieber, M., & Han, J. (2021): The Role of Sleep in Young Children's Development: A Review. *The Journal of Genetic Psychology*, 1-13. https://DOI:10.1080/00221325.2021.1908218
- Schreier, M. (2012). Qualitative Content Analysis in Practice. SAGE.
- Schulte, P. (2014). Defining Water Scarcity, Water Stress, and Water Risk. https://pacinst.org/water-definitions/
- Schwandt, T.A. (2015). The Sage dictionary of qualitative inquiry. Sage.
- Scrivener, J. (2012). Classroom management techniques. Cambridge University Press.
- Seabi, J. (2012). Research designs and data collection techniques. Complete your thesis or dissertation successfully, practical guideline. Juta and Co.
- Seale, C., Gobo, G., Gubrium, J. F., & Silverman, D. (2004). *Qualitative Research Practice*. Sage.
- Sekiwu, D., Ssempala, F., & Frances, N. (2020). Investigating the relationship between school attendance and academic performance in universal primary education: The case of

Uganda. African Educational Research Journal, 8(2), 152-160. https//doi.org/ 10.30918/AERJ.82.20.017

- Selesho, J. M. (2014). Providing Quality Early Childhood Development Education: A Poverty Reduction Agenda. *International Journal of Education Science*. 6(2). 151-155.
- Shah, S. (2019). 7 Biases to avoid in qualitative research. https://doi.org/10.34193/EI-A-10726
- Shamu, T., Chimbetete, C., Egger, M., & Mudzviti, T. (2021). Treatment outcomes in HIV infected patients older than 50 years attending an HIV clinic in Harare, Zimbabwe: A cohort study. *PloS one*, *16*(6), e0253000. https://doi.org/10.1371/journal.pone.0253000
- Shange, N. (2013). Shembe religion's integration of African Traditional Religion and Christianity: A sociological case study. [Masters Dissertation]. Rhodes University.
- Shaul, S., & Schwartz, M. (2014). The role of the executive functions in school readiness among preschool-age children. *Read Write*. 27. 749-768.
- Sheldon, M. (2014). Life Skills in the Foundation Phase: A Multiple Case Study into How Life Skills is Enacted in Two Grade 3 Classrooms in Johannesburg. [M.Ed. Thesis]. University of Witwatersrand.
- Shonkoff, J. Ritcher, L., van der Gaag, J. & Bhutta, Z, A. (2012). An integrated scientific framework for child survival and early childhood development. http://pediatrics.aappublications.org/content/129/2/e460.full.html
- Sifle, B. D., & Melling, B. S. (2012). Method decisions: The advantages and disadvantages of quantitative and quantitative modes of inquiry. *Pastrol Psychology*, 61, 721-734.
- Simon, M. (2020). The role of the researcher. http://dissertationrecipes.com/wp-
- Simon, M. K., & Goes, J. (2013). Dissertations and Scholarly Research: Recipes for Success, Dissertation Success. LLC.
- Singh, I. (2012). Human development, nature and nurture: Working beyond the divide. *Biosocieties*. 7 (3). 308-321.
- Skouteris, H., Dell'Aquila, D., Baur, L. A., Dwyer, G. M., McCabe, M. P., Ricciardelli, L. A., & Fuller-Tyszkiewicz, M. (2012). Physical activity guidelines for preschoolers: a call for research to inform public health policy. *Medical Journal of Australia*. 196 (3). 174-176.
- Slavin, R. (2007). Educational Research in an Age of Accountability. Pearson Education inc.
- Slight, S., Cresswell, K., Robertson, A., Huby, G., Avery, T. & Sheikh, A. (2011). The Case Study Approach. *BMC medical research methodology*. 11(1), 100.

Smirnova, E., & Riabkova, I. (2018). Psychological features of the narrative-based play of

preschoolers today. Journal of Russian & East European Psychology., 53(2), 40-55.

- Smit, N. A., van der Linde, J., Eccles, R., Swanepoel, D., & Graham, M. A. (2021). Exploring the Knowledge and Needs of Early Childhood Development Practitioners from a Low-Resource Community. *Early Childhood Educ J* 49, 197–208.
- Smith, S.R., & Hamon, R.R. (2012). Exploring Family Theories (3rd ed.). University Press.
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*. 104. 333-339.
- Sowell, J. (2017). Good Instruction-Giving in the Second-Language Classroom. *English Teaching Forum.* 55(3). 10-19.
- South African Government. COVID-19 / Novel Coronavirus 2021. https://www.gov.za/Coronavirus#
- South African Human Rights Commission. (2014). Report on the Right to Access Sufficient Water and Decent Sanitation in South Africa. http://www.sahrc.org.za/home/21/files/FINAL%204th%20Proof%204%20March%20-%20Water%20%20Sanitation%20low%20res%20(2).pdf
- Spaull, N. (2020). Overview and findings: NIDS-CRAM synthesis report wave 1. The NIDS-CRAM Team.
- Spaull, N., Daniels, R. C, Ardington, C., Benhura, M, Bridgman, G., Brophy, T. Burger, R., Burger, R., Buttenheim, A., Casale, D., English, R., Espi, G., Ingle, K. Kerr, A., Kika-Mistry, J., y Köhler, T., Kollamparambil, U., Kotzé, J., Leibbrandt, M., Magejo, P. et al. (2021). Working Paper Series: An overview of results from NIDS-CRAM Wave 4 NIDS-CRAM Wave 4 Synthesis Report. The NIDS-CRAM Team.
- Spaull, N., & Kotze, J. (2015). Starting behind and staying behind in South Africa: The case of insurmountable learning deficits in mathematics. *International Journal of Educational Development*, 41, 13-24.

Srinivasacharlu, A. (2019). Continuing Professional Development (CPD) of Teacher

Educators in 21st Century. *Shanlax International Journal of Education*, 7(4), 29–33. https://doi.org/10.34293/ education. v7i4.624

St. John, S. & Wynd, D. (2008). Growing inequality and child poverty. In S. St. John and
D.Wynd (Eds.), *Left behind: How social and income inequalities damage New Zealand children* (pp.12-26). Child Poverty Action Group.

- Stanley, K. (2007). Design of randomized controlled trials. Circulation, 115,1164–1169.
- Stark, H. & Brown Trinidad, S. (2007). Choose Your Method: A Comparison of Phenomenology, Discourse Analysis and Grounded Theory. *Qualitative Health Research*. 17(10), 1372-1380.
- Starman, A. (2013). The case study as a type of qualitative research. *Journal of Contemporary Education Studies*, 1, 28-43.
- Statham, J. & Chase, E. (2010). Childhood Well-being: A Brief Overview. Childhood Wellbeing research centre. http://www.cwrc.ac.uk/documents/CWRC\_Briefing\_paper.pdf
- Statistics South Africa (2019). *Inequality Trends in South Africa: A multidimensional diagnostic of inequality.* https://www.afd.fr/en/ressources/inequality-trends-south-africa-multidimensional-diagnostic-inequality
- Statistics South Africa (2020). *Children living in poverty*. https://www.unicef.org/southafrica/media/4241/file/ZAF-multidimensional-childpoverty-analysis-policy-brief-07July-2020.pdf
- Sfeatcu, R., Cernuşcă-Miţariu, M., Ionescu, C., Roman, M., Cernuşcă-Miţariu, S., Coldea, L.& Burcea, C. C. (2014). The concept of well-being in relation to health and quality of life. *European Journal of Science and Theology*, 10(4), 123-128.
- Stoewen, D. L., (2017). Dimensions of Wellness: Change your Habits, Change your Life. The Canadian Veterinary Journal. 58(8). 861-862.
- Strauss, A. & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures* for developing grounded theory (2nd ed.). Sage.
- Stuckey, H. L. (2013). Three types of interviews: Qualitative research methods in social health. *Journal of Social Health and Diabetes*. (1), 56-59.
- Subotnik, R. F., Olszewski-Kubilius, P., & Arnold, K. D. (2003). Beyond Bloom: Revisiting environmental factors that enhance or impede talent development. In J. H. Borland (Ed.), *Rethinking gifted education* (pp.227-238). Teachers College Press.
- Summers, J. K., Smith, L. M., Case, J. L. & Linthurst, R. A. (2012). A review of the elements of human well-being with an emphasis on the contribution of ecosystem services. *Ambio*, 41(4), 327–340.

- Sundler, A. J., Lindberg, E., Nilsson, C. & Palmér, L. (2019). Qualitative thematic analysis based on descriptive phenomenology. *Nursing open*, 6(3), 733–739.
- Sutapa, P., Pratama, K. W., Rosly, M. M., Ali, S., & Karakauki, M. (2021). Improving Motor Skills in Early Childhood through Goal-Oriented Play Activity. *Children (Basel, Switzerland)*, 8 (11), 994.
- Sutton, J. & Austin, Z. (2015). Qualitative Research: Data Collection, Analysis, and Management. *The Canadian Journal of Hospital Pharmacy*. 68(3): 226–231.
- Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *SSRN Electronic Journal* 5(2), 18-27.
- Talan, T.N. & Bloom, P.J. (2018). Business Administration Scale for Family Child Care. Teachers College Press.
- Tashakkori, A., & Teddlie, C. (2nd ed.). (2010). *Handbook of Mixed Methods in Social and Behavioural Research*. Sage.
- Tashakkori, A., & Teddlie, C. (eds.). (2003). Handbook of Mixed Methods in Social and Behavioural Research. Sage.
- Taylor, T. N., Mantell, J. E., Nywagi, N., Cishe, N. M., & Cooper, D. (2013). He lacks his fatherhood: Safer conception technologies and the biological imperative for fatherhood among recently-diagnosed Xhosa-speaking men living with HIV in South Africa. *Health* and Sexuality, 15(9), 1101-1114.
- Thanh N. C., & Thanh, T. T. L. (2015). The Interconnection between Interpretivist Paradigm and Qualitative Methods in Education. *American Journal of Educational Science*. 2(1). 24-27.
- The Children's Act 560 of Ghana.

http://elibrary.jsg.gov.gh/fg/laws%20of%20ghana/2%20REP/CHILDREN%E2%80%99 S%20ACT,%201998%20ACT%20560.htm

The Mercury (20 July 2021)

The South African Children's Act 38 of 2005

The South African Economy, (2020).

https://www.afdb.org/en/countries/southern-africa/south-africa/south-africa-economic-outlook

The South African Institute for Distance Education (SAIDE) (2010). Retrieved February 17, 2020, from https://www.saide.org.za/

The World Bank (2017). Retrieved January 10, 2021, from

https://pubdocs.worldbank.org/en/908481507403754670/Annual-Report-2017-WBG.pdf

- The World Bank (2018). Overcoming Poverty and Inequality in South Africa. An Assessment of Drivers, Constraints and Opportunities. Retrieved July 13, 2020, from https://documents.worldbank.org/en/publication/documents-reports/documentdetail/530481521735906534/overcoming-poverty-and-inequality-in-south-africa-an-assessment-of-drivers-constraints-and-opportunities
- The World Bank in Ghana (2019) Retrieved August 5, 2020, from https://www.worldbank.org/en/country/ghana/overview
- Theofanidis, D., & Fountouki, A. (2019). Limitations and Delimitations in the Research Process. *Perioperative nursing*, 7(3), 155–162.
- Thomas, E., & Magilvy, J. K. (2011). Qualitative rigour or research validity in qualitative research. *Journal for Specialists in Pediatric Nursing*, 16, 151-155.
- Thomas, G. (2013). *How to do your research project: A guide for students in education and applied social science.* Sage.
- Tolich, M. (2004). Internal Confidentiality: When Confidentiality Assurances Fail Relational Informants. *Qualitative Sociology*, 27, 101–106.
- Townsend, A., Cox, S. M., & Li, L. C. (2010). Qualitative research ethics: enhancing evidencebased practice in physical therapy. *Physical therapy*, 90(4), 615-628. https://doi.org/10.2522/ptj.20080388
- Townsend, L., Dowds, J., O'Brien, K., Sheill, G., Dyer, A. H., O'Kelly, B., Hynes, J. P., Mooney, A., Dunne, J., Ni Cheallaigh, C., O'Farrelly, C., Bourke, N. M., Conlon, N., Martin-Loeches, I., Bergin, C., Nadarajan, P., & Bannan, C. (2021). Persistent Poor Health after COVID-19 Is Not Associated with Respiratory Complications or Initial Disease Severity. *Annals of the American Thoracic Society*, *18*(6), 997–1003. https://doi.org/10.1513/AnnalsATS.202009-1175OC
- Trawick-Smith, J. (2014). Early childhood development (6th ed.). Pearson
- Trochim, W. M. (2020). *The Research Methods Knowledge Base*. (2nd Edition). https://www.socialresearchmethods.net/kb/
- Tudge, J. R. H., Mokrova, I., Hatfield, B. E., & Karnik, R. B. (2009). Uses and misuses of Bronfenbrenner's bioecological theory of human development. *Journal of Family Theory & Review*, 1(4), 198–210. https://doi.org/10.1111/j.1756-2589.2009.00026.x
- Turnbull, A., Turnbull, R., Wehmeyer, M. L., & Shogren, K. (2019). *Exceptional lives: Special education in today's schools* (9th Ed). Merrill.

UNESCO. (2006). Country Profile Commission for EFA Global Monitoring Report 2007. Strong Foundations: Early Childhood Care and Education: ECCE. Fraphopoint.

UNICEF, Ghana (2011).

United Nations Children's Fund - UNICEF (2012). School Readiness: a conceptual framework.

United Nations Educational, Scientific and Cultural (UNESCO). (2015). Education for All Global Monitoring Report. https://pacinst.org/water-definitions/

US Department of Health and Human Services, 2020

US Department of State Report (2008).

- Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme Development in Qualitative Content Analysis and thematic analysis. *Journal of Nursing Education and Practice*.6(5). 100-110.
- Van der Heide, A., Rufas, A., & Supper, A. (2016) Doctoral Dissertation Defenses: Performing Ambiguity Between Ceremony and Assessment. *Science as Culture*, 25(4), 473-495.
- Van Niekerk, L., Ashley-Cooper, M., & Atmore, E. (2017). Effective Early Childhood Programme Options Meeting the Needs of Young South African Children. Centre for Early Childhood Development.
- Van Zyl, E. (2011). The relationship between school readiness and school performance in Grade 1 and Grade 4. *South African Journal of Childhood Education*, 1(1), 82-94.
- Vanclay, F., Baines, J. T., & Taylor, C. N. (2013) Principles for ethical research involving humans: ethical professional practice in impact assessment Part I. *Impact Assessment and Project Appraisal*, 31(4), 243-253.
- Vegas, E., & Santibanez, L. (2010). *The Promise of Early Childhood Development in Latin America and the Carribean. Issues and Policy Options.* World Bank.
- Vermandel, A., Van Kampen, M., Van Gorp, C., & Wyndaele, J. J. (2008). How to toilet train healthy children? A review of the literature. *Neurourology and urodynamics*, 27(3), 162– 166. https://doi.org/10.1002/nau.20490
- Visser, M., Grossmark, J., Krüger, S., Smith, C., van Zyl, M., Willemse, Z., & Wright, C. (2021). The Challenges Experienced by Practitioners from Under-Resourced Early Childhood Development Centres in South Africa: A Single Site Study. *South African Journal of Occupational Therapy*, 51(3), 14-24. https://dx.doi.org/10.17159/2310-3833/2021/vol51n3a3
- Voets, J. Keast, R., & Koliba, C. (2019). *Networks and Collaboration in the Public Sector: Essential research approaches, methodologies and analytic tools*. Taylor and Francis.

- Vorster, A., Sacks, A., Amod, Z., Seabi, J., & Kern, A. (2016) The everyday experiences of early childhood caregivers: Challenges in an under-resourced community. *South African Journal of Childhood Education*, 6(1), 257.
- Vygotsky, L. (1978). Interaction between learning and development. *Readings on the development of children*, 23(3), 34-41.
- Wagner, K. D., Davidson, P. J., Pollini, R. A., Strathdee, S. A., Washburn, R. & Palinkas, L.
  A. (2012). Reconciling incongruous qualitative and quantitative findings in mixed methods research: exemplars from research with drug using populations. *The International journal on drug policy*, 23(1), 54–61.
- Waligora, M., Różyńska, J., & Piasecki, J. (2016). Child's objection to non-beneficial research: capacity and distress based models. *Medicine, health care, and philosophy*, 19(1), 65–70. https://doi.org/10.1007/s11019-015-9643-8
- Walton, P. D. (2014). Using singing and movement to teach pre-reading skills and work reading to kindergarten children: An exploratory study. *Language and Literacy*, 16(3), 54–57.
- Wa-Mbaleka, S. (2020). The Researcher as an Instrument. In: Costa A., Reis L., Moreira A.
   (eds) Computer Supported Qualitative Research. WCQR 2019. Advances in Intelligent Systems and Computing. Springer.
- Wang, F., & Boros, S. (2021). The effect of physical activity on sleep quality: A systematic review. *European Journal of Physiotherapy*, 23(1), 11–18. https://doi.org/10.1080/21679169.2019.1623314
- Ward, D. (2011). School Policies on Physical Education and Physical Activity. A Research Synthesis. Active Living Research.
- Watson A, Timperio A, Brown H, Best K. & Hesketh, K.D. (2017). Effect of classroom-based physical activity interventions on academic and physical activity outcomes: a systematic review and meta-analysis. *Int J Behav Nutr Phys Act.*, 14(1),114.
- Welman, J. C. & Kruger, S. J. (1999). Research Methodology for the Business and Administrative sciences. Thompson International.
- Welman, J. C., Kruger, S. J. & Mitchell, B. (2007). *Research Methodology*. Oxford University Press.
- Wentura, D. (2019). Cognition and emotion: on paradigms and metaphors. *Cognition and Emotion*. 33(31).1-9.
- Werner, E. E. & Smith, R. S. (2001). *Journeys from childhood to midlife: Risk, resilience, and recovery.* Cornell University Press
- Wethington, E., & McDarby, M. L. (2015). Interview Methods (Structured, Semi structured,

Unstructured). Wiley Online Library.

https://doi.org/10.1002/9781118521373.wbeaa318

- White, J. (2008). Playing and Learning Outdoors: Making Provision for high-quality Experiences in the outdoor Environment. Routledge.
- White, L (2011). The internationalisation of Early Childhood Education and Care Issues: Framing Gender Justice and Child Well-being. Governance: An International Journal of Policy, Administration, and Institutions, 4(2), 1-43.
- Whiting, B., & Edwards, C. P. (1988). A cross-cultural analysis of sex differences in the behaviour of children aged 3 through 11. In G. Handel (Ed.), *Childhood socialisation* (pp. 281–297).
- Whitley, D. M., Kelley, S. J., & Lamis, D. A. (2016). Depression, Social Support, and Mental Health: A Longitudinal Mediation Analysis in African American Custodial Grandmothers. *International journal of aging & human development*, 82(2-3), 166–187. https://doi.org/10.1177/0091415015626550
- Williams, H. G., Pfeiffer, K. A., O'Neill, J.R., Dowda, M., McIver, K.L., & Brown, W. H. (2008). Motor skill performance and physical activity in preschool children. *Obesity*. 16(6):1421-6.
- Williams, P. D., Balabagno, A. O., Manahan, L., Piamjariyakul, U., Ranallo, L., Laurente, C. M., Cajucom, L., Guela, D., Kimbrough, M., & Williams, A. R. (2010). Symptom monitoring and self-care practices among Filipino cancer patients. *Cancer nursing*, 33(1), 37–46. https://doi.org/10.1097/NCC.0b013e3181b0f2b4
- Williamson, T. K. (2007). The individual in research. In T. Long & M. Johnson (Eds.), Research in the real world (pp. 9-28). Churchill Livingston.
- Willis, J. W. (2012). *History and Foundations of Interpretivist Research. In Foundations of Qualitative Research: Interpretive and Critical Approaches.* SAGE Publishing.
- Winefield, H. R., Gill, T. K., Taylor, A. W., & Pilkington, R. M. (2012). Psychological wellbeing and psychological distress: Is it necessary to measure both? *Psychology of Well-Being*, 2(1), 1–14.
- Wolf, S., Aber, J., Berhman, J., & Tsinigo, E. (2018). Experimental Impacts of the 'Quality Preschool for Ghana' Interventions on Teacher Professional Well-being, Classroom Quality, and Children's School Readiness. *Journal of Research on Educational Effectiveness*. DOI: 10.1080/19345747.2018.1517199
- Wong, P. W. (2014). A Snapshot on Qualitative Research Method. Academic Journals. 9(5). 130-140.

Woolfolk, A. & Perry, N. E. (2012). Child and adolescent development. Pearson.

World Vision (2014).

https://www.wvi.org/international/publication/world-vision-international-annual-review-2014

- Wu, C. C., Liao, S. H., Chen, Y. J., & Hsu, W. L. (2011). Service quality, brand image and price fairness impact on the customer satisfaction and loyalty. *IEEE International Conference on Industrial Engineering and Engineering Management*, 1160-1164. https://doi.org/10.1109/IEEM.2011.6118097
- Xu, M. A., & Storr, G. B. (2012). Learning the concept of researcher as instrument in qualitative research. *Qualitative Report*. 7(21).
- Xu, Z., Shi, L., Wang, Y., Zhang, J., Huang, L., Zhang, C., Liu, S., Zhao, P., Liu, H., Zhu, L., Tai, Y., Bai, C., Gao, T., Song, J., Xia, P., Dong, J., Zhao, J., & Wang, F. S. (2020). Pathological findings of COVID-19 associated with acute respiratory distress syndrome. *The Lancet. Respiratory medicine*, 8(4), 420–422. https://doi.org/10.1016/S2213-2600(20)30076-X
- Yadav, M. (2019). What is Lacking in India's ECCE System? http://bweducation.businessworld.in/article/What-Is-Lacking-In-India-s-Early-Childhood-Care-and-Education-System-/22-02-2020-184548/
- Yanow, D. & Schwartz-Shea, P. (2011). Interpretive Approaches to Research Design: Concepts and Processes. Routledge.
- Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report*, 20, 134 -152.
- Yin, R. K. (2003). Case Study Research. Design and Methods. SAGE.
- Yin, R. K. (2009). Case Study Research: Design and Methods. SAGE.
- Yin, R. K. (2010). Qualitative research from start to finish. The Guilford Press.
- Yin, R. K. (2014). Case study research: Design and methods. Sage.
- Yong, M., & Zhang, Y. (2021). Poverty Alleviation by Education: Exploration and Experience from China–Analysis Based on China's Policy of Poverty Alleviation by Education. Science Insights Education Frontiers, 8(1), 959-973.
- Youell, R., & Youell, C. (2011). Effective NLP Skills. Kogan Page.
- Yzel, M. (2017). Teachers' Perceptions of the Implementation of School Readiness Assessment Instruments. [Unpublished Masters Dissertation]. University of Pretoria.
- Zeng, N., Ayyub, M., Sun, H., Wen, X., Xiang, P. & Gao, Z. (2017). Effects of Physical Activity

on Motor Skills and Cognitive Development in Early Childhood: A Systematic Review. *BioMed Research International*. https://doi.org/10.1155/2017/2760716

- Zilberstein, K. & Popper, S. (2014). Clinical competencies for the effective treatment of foster children. *Clinical Child Psychology and Psychiatry*, 21(1). https://doi: 10.1177/1359104514547597
- Zschucke, E., Gaudlitz, K. & Ströhle A. (2013). Exercise and Physical Activity in Mental Disorders: Clinical and Experimental Evidence. *Journal of Preventative Medicine and Public Health*, 46(1),12-21. https://doi:10.3961/jpmph.2013.46.S.S12

### **APPENDICES**

### **APPENDIX A: ETHICAL CLEARANCE CERTIFICATE**



23 January 2019

Ms Ngami Phumzie isabella Pewa 217078992 School of Education Edgewood Campus

Dear Ms Pewa

Protocol reference number: HSS/1898/018D Project title: Physical well-being of four year old learners and their readiness for Grade R: A case study of Early Childhood Development Care and Education Centre

Full Approval – Expedited Application In response to your application received 15 October 2018, the Humanitles & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Theraafter Recertification must be applied for on an annual basis

I take this opportunity of wishing you everything of the best with your study.

Dr Rosemary Sibanda (Chair) Humanities & Social Sciences Research Ethics Committee

/am

Yours faithfully

co Supervisor: Professor JN Mashiya co Academic Leader Rosparch: Dr SB Khoza co School Administrator: Ms Ms Sheryl Jeenarain



## APPENDIX B: KZN DSD PERMISSION TO CONDUCT RESEARCH



205 Field Ficer, Office No. 310 205 Fieldermarkz Street Private Bag X9144 PIETERMARITZBURG 3201

Date: 27 September 2018

Ms N.P I Phewa P.O.Box 139 Kwa-Dlangezwa 3886

Email: phumzilepewa74@gmail.com

082 870 0054

Dear Ms Pewa

REQUEST FOR AUTHORITY TO CONDUCT ACADEMIC RESEARCH (PhD)

- 1. We refer to the above matter, including our latest communication.
- 2. Kindly accept this letter as our permission and authority to conduct the academic research for the purposes of, or in a part fulfilment of the requirements of your studies towards the attainment of the PhD degree/ qualification.
- 3. You may have limited access to the records, files and information on the physical well-being of four-year old children and their readiness for Grade R, for the purpose of the study, subject to the applicable Code of Ethics, rules and procedures.
- 4. We trust the above is in order

Adv. N.W. Hlabisa

Deputy Information Officer 

### APPENDIX C: LETTER OF INFORMED CONSENT (ENGLISH)

PO Box 139 KwaDlangezwa 3886 4 October 2018

### INFORMED CONSENT LETTER

My name is Phumzile Pewa and I am a PhD candidate studying at the University of KwaZulu- Natal, Edgewood campus, South Africa. I am conducting an action research about "Physical well-being of four year old learners and their readiness for Grade R". To gather the information, I am interested in having conversations with you, through interviews and observation of your learners. Please note that:

· Your confidentiality is guaranteed as your input will be reported only as a population member opinion.

· You are allowed to communicate in isiZulu, English or both languages.

 Any information given by you cannot be used against you, and the collected data will be used for purposes of this research only.

· Data will be stored in secure storage and destroyed after 5 years.

You have a choice to participate, not participate or stop participating in the research. You will not be
penalized for taking such an action.

. The research aims at observing whether the four year old learners are physically ready for Grade R.

· Your involvement is purely for academic purposes and there are no financial benefits.

 If you are willing to be a participant, please indicate (by ticking as applicable) whether or not you are willing to allow the conversations to be recorded by the following equipment:

	Willing	Not willing
Audio recording		

I can be contacted at:

Email: phumzilepewa74@qmail.com/ 083 354 7159

My supervisor is Professor JN Mashiya who is located in Early Childhood Development on Edgewood campus of the University of KwaZulu-Natal. Contact details: email: <u>mashiyaj@ukzn.ac.za/</u> 031 260 4276

The contact person in the research office is: Mr Premlall Mohun - Senior Administrative Officer Email: mohunp@ukzn.ac.za Tel: 031 260 4557 Thank you for your contribution to this research.

#### DECLARATION

I......(Full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project. I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT DATE

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### **APPENDIX D: LETTER OF INFORMED CONSENT (ISIZULU)**

PO Box 139 KwaDlangezwa 3886 4 kuMfumfu 2018

### **INCWADI YEMVUME**

Igama lami uPhumzile Pewa. Ngingumfundi wezigu zePhD eNyuvesi yaKwaZulu-Natali, ophikweni lwase-Edgewood, eNingizimu Afrikha. Ngenza ucwaningo mayelana nokulunga kwezicubu zomzimba ebantwaneni abaneminyaka emine Kanye nokulungela kwabo ukuvofunda uGrade R.

Ukuqoqa ulwazi, nginelukuluku lokabamba izingxoxo nawe, ngenze inhlolovo ngibuye ngibuke ukuthi abafundi bawunyakazisa kanjani umzimba.

Qaphela lokhu:

· Lo msebenzi uyimfihlo futhi uyokwethulwa njengombono wengxenye yomphakathi.

Uvumelekile ukukhuluma ngesiZulu, isiNgisi noma olunye lwalezizilimi.

· Ulwazi oyolunikeza ngeke lusetshenziselwe ukukulimaza. Lolu lwazi luyosetshenziselwa ucwaningo kuphela.

Ulwazi luyogcinwa endaweni ephephile, luhlakazwe emva kweminyaka emihlanu.

· Ungakhetha ukuba yingxenye, ukungabi yingxenye noma ukuhoxa ekubeni yingxenye kulolu cwaningo.

Awuyukujeziswa ngaleso senzo.

· Ucwaningo luhlose ukuthola ukuthi abantwana abaneminyaka emine sebekulungele yini ukuyofunda. uGrade R.

Ukuba yingxenye yalo msebenzi kumayelana nezemfundo kuphela. Akuyukubakhona imali eyinzuzo.

· Uma ufisa ukuba yingxenye, khombisa ngokuqhwiza endaweni efanele ukuthi uyavuma noma cha ukuthi izingxoxo zigoshwe ngomshini:

	Ngiyavuma	Angivumi
Isiqophamazwi		

Ungaxhumana nami:

i-Emeyili: phumzilepewa74@gmail.com Inombolo yocingo: 0833547159

Umeluleki wami uSolwazi JN Mashiya othalakala eEdgewood Campus eNyuvesi yakwaZulu-Natali. i-Emeyili: Mashiyaj@ukzn.ac.za

Inombolo yocingo: (031) 260 4276

Ongaxhumana naye ehhovisi locwaningo: UMnu. Premlall Mohun - uMabhalane Omkhulu i-Emeyili: mohunp@ukzn.ac.za

Inombolo yocingo: (031) 260 4557

Ngiyabonga ukubamba ighaza kwenu kulolu cwaningo.

Mina

(amagama aphelele) ngiyaqinisekisa ukuthi ngiyakuqonda okuqukethwe umqulu nohlobo locwaningo futhi ngiyavuma ukuba yingxenye yalolu cwaningo.

Ngiyaqonda ukuthi nginelungelo lokuhoxa kulomusebenzi noma nini uma ngifisa.

### ISiginesha yoyingxenye yocwaningo

\_\_\_\_\_

## **APPENDIX E: INTERVIEW SCHEDULE FOR ECD PRACTITIONERS**

### **INTERVIEW SCHEDULE**

## INTERVIEW SCHEDULE FOR ECD PRACTITIONERS

### This is a study of participative research at ECD Centre in the King Cetshwayo district.

The purpose of this section is to answer the questions on the following aspects:

- 1. The nature of practices ECD practitioners employ to enhance physical well-being of four year old learners.
- 2. The extent to which the ECD centre promotes physical well-being of four year old learners.
- 3. The extent to which ECD practitioners are pedagogically prepared to plan for physical activities of four year old learners.
- 4. The extent to which four year old learners are ready for grade R physical activities.

Position:	Time :
Qualifications:	Location of the interview :
Date:	Number of years as ECD Practitioner:

NB.: All participants need to sign the consent form, and to make preliminary test of the recording equipment.

### **QUESTIONS ON PHYSICAL WELL-BEING OF FOUR YEAR OLD LEARNERS**

1. Background Questions

a) What is your job title?

.....

- b) What are your responsibilities?
- c) How long have you been with this ECD centre?
- d) How did you get started in this profession?

# 2. Practices ECD practitioners employ to enhance physical well-being a) What kind of activities do you employ to enhance physical well-being of four year old learners?

b) How often do you engage learners in such activities?

.....

## 3. How the ECD centre promotes physical well-being

a) How well-equipped is the ECD centre for enhancement of physical well-being of four year old learners?

.....

b) Are there any programmes that the ECD is part of that enhance physical well-being?

## 4. Pedagogical preparedness of ECD practitioners

- a) How do you plan for physical activities of four year old learners?
- b) Are there any documents that speak to your planning for physical activities?
- c) Have you received any formal training in ECD?

## 5. Readiness of four year old learners for grade R

a) How ready are four year old learners for grade R physical activities?

.....

b) How do you measure their readiness?

.....

# **APPENDIX F: OBSERVATION SCHEDULE**

# **Observation Schedule**

# **Fine Motor Skills**

~	X
•	Build a tower of 9-10 small blocks
•	Use playdough to make balls, snakes etc.
•	Build things with large linking blocks
•	Draw a circle by herself/himself
•	Copy a cross (+)
•	Imitate you drawing a square
•	Cut across a piece of paper
•	Start to cut along a straight line
•	Manage buttons

# **Gross Motor Skills**

# Sing active songs

Sing one of these classic songs, and add some action:

✓	X
٠	I'm a Little Teapot
•	If You're Happy and You Know It
•	Here We Go 'Round the Mulberry Bush

- ✓ X
- Play indoor hopscotch
- Walking around the neighbourhood or park
- **Obstacle courses** with rocks, logs, or playground equipment.
- Balancing: Have children walk on a low beam or plank at the
- playground or a homemade **balance beam**.
- **Riding** tricycles, scooters, and other ride-on toys.
- Wheelbarrow walking.
- Unstable surfaces: Walking/climbing over unstable surfaces
- Large balls: Begin catching with a large ball/balloon and only
- after the skill is mastered, move to a smaller sized ball.
- **Playground** climbing and swinging.

# **APPENDIX G: TURNITIN REPORT**

### Turnitin Originality Report

Processed on: 02-Nov-2022 2:01 PM CAT ID: 1859501005 Word Count: 55299 Submitted: 6

PHYSICAL WELL¬-BEING OF FOUR-YEAR-OLD LEARNERS AND THEIR READINESS FOR GRADE R By PHUMZILE ISABELLA PEWA

	Similarity by Source	
Similarity Index	Internet Sources:	5%
5%	Publications: Student Papers:	1% 4%

## **APPENDIX H: EDITORIAL CERTIFICATE**

