

INFORMATION-SEEKING BEHAVIOUR OF GRADE R PRACTITIONERS IN  
THE EKURHULENI METROPOLITAN MUNICIPALITY

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MDMKEP001

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## DECLARATION

I, Kepi David Madumo, declare that this dissertation with the title *The information-seeking behaviour of Grade R practitioners in the Ekurhuleni Metropolitan Municipality* is my own work and has not been previously submitted in part or whole to any institution or publisher. All sources used to describe or support an argument as well as quotes by other authors have been acknowledged.

Signed by candidate

Signature

Kepi D Madumo

Date 10/03/2017

## DEDICATION

This research is dedicated to my wife, Sheila and my children Katlego, Kagiso and Naledi for their understanding in allowing me an opportunity to pursue my studies; to my late mother, Hleziphi (nee Yende), for planting in me a love for education; to my late brother, Mzimkhulu ,and late sisters, Irene and Motladile, whom I miss so much; and to my father for his teaching and for always believing that an investment in education is the most valuable tool with which parents can provide their child.

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A study of this nature would not have been possible and successful if I did not follow the right protocol and obtain permission from the relevant authorities, namely the Gauteng Department of Education, and the Gauteng Department of Health and Social Development. I extend my gratitude to the school principals for giving me access to their schools and allowing the practitioners to participate in the study.

Most importantly, I would like to extend my appreciation to all the dedicated and passionate Grade R practitioners, who voluntarily participated in the study, despite their busy schedule. I would like to thank them for their insights, expertise and wealth of experience; I learnt a lot about the profession and they contributed immensely to the success of this study.

I also thank my colleagues at the EMM libraries for their assistance and for making their libraries available as venues for the focus group discussions. Thanked, in particular, are the Control Librarians at Brakpan, Reiger Park, and Winnie Mandela Community Libraries, as well as the staff of the Thokoza Youth Centre.

## ABSTRACT

In this study, the information-seeking behaviour of Grade R practitioners in the Ekurhuleni Metropolitan Municipality in Gauteng Province, South Africa was investigated. The investigation included determining information needs, information sources often consulted, actions and strategies used when seeking information and challenges faced by these practitioners when seeking information. Early Child Development practitioners need information to increase their knowledge for optimum performance of their duties. Literature points to a possibility that if the Grade R practitioners can have access to relevant, accurate and timeous information and gain essential information retrieval skills, they might develop capacity for innovation, creativity and ultimately improve their teaching.

Currently, Ekurhuleni Metropolitan Municipality libraries do not have any service dedicated to Early Child Development practitioners, yet Early Child Development is a national government priority stipulated in the National Development Plan. In the interest of developing relevant information services for Early Child Development practitioners, as Early Child Development is one of the national priorities, the researcher needed to ascertain their information needs and information-seeking behaviour. Using Leckie, Pettigrew and Sylvain's General Model of the Information Seeking of Professionals as the theoretical framework; and situated within interpretivist paradigm, the study took a qualitative approach to collect data through group discussions and an interview with a key informant.

The results are based on seven focus group discussions with the practitioners from public schools, independent schools and community-based Early Child Development centres. These show that the practitioners' most popular information sources are Google, social media, especially Pinterest, and their colleagues. The major barriers to information access are time restraints and language. The nature of information needed to perform their tasks ranges from curriculum-related information, various child development oriented topics, legislation and information related to their personal and professional development. A few participants who claimed to use libraries indicated that they use

neither the library catalogue nor the online databases in the library. In fact, they preferred to browse the shelves to find books and had never asked the library staff for any assistance.

The majority of the participants do not use libraries, even though they appreciated the importance of information and library services in providing critical information for execution of their duties. To satisfy the demand for information, it is recommended that the Ekurhuleni Metropolitan Municipality libraries and the Gauteng Department of Education school libraries should consider a coordinated and accessible library and information service that supports Early Child Development practitioners. The plans and design of library and information service in the Ekurhuleni Metropolitan Municipality should accommodate the information needs expressed by the Grade R practitioners.

Keywords: Early childhood practitioner, Grade R, pre-preparatory, pre-school, pre-primary, information-seeking behaviour, Ekurhuleni Metropolitan Municipality, early childhood development, library and information service(s).

## LIST OF ABBREVIATIONS AND ACRONYMS

ANC	African National Congress
CAPS	Curriculum Assessment Policy Statement
ECD	Early Childhood Development
EMIS	Education Management Information System
EMM	Ekurhuleni Metropolitan Municipality
GDE	Gauteng Department of Education
GMISP	General Model of Information-seeking of Professionals
GPG	Gauteng Provincial Government
Grade R	The year before formal school starts
ISASA	Independent Schools Association of Southern Africa
ISCM	Information Seeking and Communication Model
LIS	Library and Information Science/ Service(s)
NPO	Non-Profit Organisation
NQF	National Qualifications Framework
SACE	South African Council for Educators
SDG	United Nations Sustainable Development Goals
SGB	School Governing Bodies
UCT	University of Cape Town
UN	United Nations
UNCRC	United Nation's Convention on the Rights of the Child
UNICEF	United Nations Children's Fund

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## CHAPTER 1

### INTRODUCTION AND BACKGROUND TO THE STUDY

#### 1.1 Context and rationale

This study is an investigation of information needs and information-seeking behaviour of Grade R<sup>1</sup> practitioners in Ekurhuleni Metropolitan Municipality<sup>2</sup> (EMM) in Gauteng, South Africa. The investigation includes the information sources they often consult to address their information needs as well as the barriers to their information-seeking process. The study focuses primarily on the information needs and information-seeking behaviour related to their work as ECD practitioners.

In the context of this study and according to the literature consulted, an information need is understood as a necessity for the Grade R practitioner to find the information required to achieve an objective, perform a task, solve a problem, fill an information or knowledge gap, eradicate uncertainties or anxieties and make an informed decision. It is recognised in the study that information needs can be expressed, unexpressed or dormant (Devadason & Lingam, 1997:41). It takes cognisance of the fact that sometimes people might not even realise they have information needs or they may be completely unaware that they need information (Fourie, 2006:101; Ikoja-Odango & Mostert, 2006:147). Moreover, information-seeking behaviour is considered as a process initiated by Grade R practitioners to seek information to address identified information needs through interaction with information sources or information retrieval systems (Spink & Cole 2006:25; Wilson 2000:49). These may include, for example, approaching information systems or a visit to the library with a specific purpose, either as individuals, or through collaborating with others to seek information, or finding information by chance that was not necessarily being sought after – ‘serendipitous information-seeking or seeking information through proxy or agents’ (McKenzie, 2003:23-27). The study’s stance is that information seeking is a process that is done

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<sup>1</sup> The year before formal schooling starts.

<sup>2</sup> Ekurhuleni Municipality is one of the three metropolitan municipalities in Gauteng province hosting, among other important landmarks, the O.R.Tambo International Airport that is the largest in Africa.

by individuals or collaboratively as a group, mainly because of an information need (Case, 2012:89-90).

## 1.2 An overview of ECD in South Africa

According to Atmore, Niekerk and Ashley-Cooper (2012:01), recognition of the critical role and importance of ECD in society is well documented. Moreover, there is ‘overwhelming global evidence that quality ECD is essential to overcome intergenerational poverty’ (Williams & Samuels, 2001:06). Martin et al (2014:18) also note that there is conclusive evidence that investment in ECD produces lifetime development benefits for the child and society as a whole. Furthermore, Atmore, Niekerk and Ashley-Cooper (2012:01) argue that there are benefits linked to providing a structured and quality early childhood services and programmes. These benefits translate into an ‘increased primary school enrolment; enhanced school performance; lower repetition and dropout rates; reductions in juvenile crime rates; reduced remedial education costs; and improved economic and social productivity in adulthood’.

Article 27 of the United Nation’s Convention on the Rights of the Child (UNCRC) (ratified in 1995 by the government of South Africa), declares that ‘every child has the right to a standard of living adequate for his/her physical, mental, spiritual, moral and social development’ (UN, 1989). According to Williams and Samuels (2001:07), the South African government became a signatory to the United Nations Convention on the Rights of Child on 16 June 1995. In a democratic South Africa,<sup>3</sup> this commitment was further realised when South Africa Constitution of 1996<sup>4</sup> – Bill of Rights made provision for children’s specific socio-economic rights and rights to basic education. Thereafter, there has been a growing support for ECD. This can be seen in the White Paper 5 of 2001, drafted as a government policy recommending the establishment of a national system for

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<sup>3</sup> South Africa attained its democracy in 1994 following the first democratic election. The new government took over from the apartheid (ideology- based segregation) government that existed from 1948 until 1994. The provision of education was racially unequal; Whites, Coloureds and Indians had their own education departments. Blacks received poor education to ensure supply of cheap labour and keep them out of the modern economy (Fiske & Ladd, 2006).

<sup>4</sup> Based on the provision of the Constitution that declares that ‘a future is founded on the recognition of human rights, democracy, and peaceful coexistence and developmental opportunities for all South Africans irrespective of colour, race, class, belief and sex.’

the mandatory provision of the ECD for children from birth to 9 years. The White Paper emphasised that all children entering Grade 1 should have participated in an accredited reception year programme known as Grade R (Department of Education, 2001: s 4). This development marked the beginning of a political commitment towards ECD sector in South Africa. It gained momentum in 2012 when the South African government pronounced that ECD would be a policy priority and it commissioned the ‘national diagnostic review on early childhood development’ (Department of Monitoring and Evaluation, 2012:01). Subsequently, in 2013 Cabinet approved the National Integrated Plan 2013-2017 as well as the development of the National ECD Policy and programmes that were completed in March 2014. Its final draft was published in the *Government Gazette* dated 13 March 2015 for public comments, which was approved on 9 December 2015 (Department of Social Development, 2015:01).

Atmore, Van Niekerk and Ashley-Cooper (2012:06) acknowledge the work done by national government to improve access to and the quality of early learning in Grade R. However, they point out that, despite all these commitments and good intentions, there are still challenges facing the ECD sector, such as a lack of qualified practitioners. They further highlight that there is very little update on quantitative data available on the ECD sector in South Africa and its practitioners. The findings of the 2000 National Audit on ECD by Williams and Samuels, (2001:43) revealed that:

of the 54,503 practitioners working with children in ECD sites, 12% are qualified, 88% require additional training of some kind and 23% have no training at all. Moreover, the ECD sites catering for predominantly Black African learners have the greatest number of below average ratings on service quality.

For a long time, the employment, training and qualifications of Grade R practitioners has been a challenge in South Africa. This could be attributed to a couple of issues. First, the high levels of poverty and unemployment have made running a home-based or community-based ECD centre, registered or unregistered as a non-profit organisation (NPO), a form of security for income and self-employment. Atmore, Niekerk and Ashley-Cooper (2012:15) make the point that it has increasingly become an attractive option for women living in impoverished township communities to open ECD centres. Secondly, in ordinary public and private schools, the School Governing Bodies (SGB) employ Grade R practitioners. This creates disparity in terms of qualifications and working conditions between Grade R practitioners and teachers. This is because Grade R

practitioners become school employees who earn salaries paid by schools while teachers are public servants whose salaries are paid by government and usually at a higher salary scale. Furthermore, resources and standards differ from school to school, particularly between predominantly black and white ECD centres. The racial disparities of the apartheid era continue to depict inequalities in the quality of service being offered, as well as the provision of resources in schools and ECD centres. As result, there is inequitable provision of and access to ECD services and, as such children from affluent suburbs and middle-class families have access to better services of much higher quality than on children from disadvantaged and indigent households.

In Ekurhuleni, the majority of ECD centres, crèches, day-care centres, and pre-schools are community or home-based centres owned and managed by citizens. In all instances, the provision of ECD services is on a fee-basis unlike in public schools where fees play a relatively small role because of the quintile system<sup>5</sup>. The ECD services continue to be fragmented, even though the municipality has a mandate to provide childcare facilities and services. The provision of ECD services in townships and poor communities were initiated based on the ideals of *Vukuzenzele* meaning ‘arise and do it yourself’, while very few were based on the need to protect the child’s rights and to develop his or her full cognitive, emotional, social and physical potential (EMM ECD Intergraded Implementation Strategy<sup>6</sup>).

The EMM ECD strategy document, like many other reports and studies, highlights the prominent challenges facing the majority of ECD centres in the EMM. These include the fact that ECD practitioners do not have basic childcare qualification (Atmore, Van Niekerk and Ashley-Cooper 2012:6). This means that the children who are at these centres might not have a solid foundation. In addition, in impoverished communities, statistics show that majority of parents are migrant labourers and work far from home and therefore often leave their children in ECD centres for the whole day. This may be doing more harm than good to their children’s cognitive and psychomotor

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<sup>5</sup> In South Africa, a quintile system is used to allocate resources to schools according to wealth. It has five levels: Quintile 1 – 5. Quintile 1 schools receive 100% subsidy from government majority of them are found in the townships or historically disadvantaged communities and are non-fee-paying schools. While schools in quintile five are historically advantaged Model C schools found in the affluent towns and suburbs and, therefore, receives the least subsidy.

<sup>6</sup> The EMM ECD strategy report adopted by the Ekurhuleni City Council.

development, if they are left in the care of incompetent and unqualified people. There is perpetual poor compliance with the Health bylaws, town-planning schemes and policy on crèches and nursery schools, national norms and standards of ECD and the stipulations of the Children's Act, No. 38 of 2005. There seems to be a lack of an effective system that monitors and evaluates the quality of ECDs, because the current monitoring system focuses on the compliance of laws and standards, particularly legal registration, and less on developmental programmes, their implementation and monitoring.

In South Africa, research shows that if ECD centres could adhere to 'minimum standards and provide emotional, mental, intellectual, moral, spiritual, cultural, physical and social development', the learners will be well-prepared for the formal schooling (Atmore, Van Niekerk and Ashley-Cooper, 2012:123). The researcher notes that when ECD programmes are offered, important things such as health, nutrition, safety, recreation, technology, media, capacity building for ECD practitioners, curriculum development; information access and use should not be left out. This is because putting information access and use at the forefront to many ECD programmes might help to empower the ECD practitioners and, ultimately, child development in many other areas that are essential at this crucial foundation phase of basic education. There is a possibility that the quality of their teaching might improve if the Grade R practitioners have access to relevant, accurate and timely information and acquire necessary information retrieval skills; develop capacity for innovation; and have flexibility and commitment to change. Educating and exposing Grade R practitioners to the importance of information, including information literacy skills, might prompt them to transfer such skills to the children in their care. Ultimately, such children will be better equipped to enter formal schooling. These can be done effectively if Grade R practitioners information needs and information-seeking behaviour are well known and they are served with relevant information sources and systems.

The situation in the EMM is no different from what occurs in other parts of South Africa: ECD services in EMM are characterised by a preponderance of unqualified practitioners. The majority of them do not have the necessary training and experience in ECD. Moreover, there are legislatively non-compliant ECD centres in Ekurhuleni with unsuitable, inappropriate and ad-hoc programmes, very often offering poor nutrition to children. This could be attributed to an

observation by Williams and Samuels (2001:04) that ‘high levels of poverty and unemployment have made running an ECD centre an opportunity for entrepreneurship and self-employment’.

The establishment of ECD centres seems to be an attractive option for women living in impoverished township communities and informal settlements. However, the roles and responsibilities of Grade R practitioners have changed since the introduction of the new Curriculum Assessment Policy Statement (CAPS) that was implemented for the first time in 2014 for Grades R to 3 (Department of Basic Education, 2013:01). These changes require practitioners to possess not only specialised professional skills and knowledge, but also have access to accurate, reliable and timely information.

The scenario outlined above highlights the environment within which the ECD practitioner operates, with information gaps that need to be addressed to ensure that the ECD practitioner is well informed and has the necessary information to perform his or her work roles, tasks and responsibilities. Although information alone may not give anyone, let alone the ECD practitioners, professional skills to tackle curriculum demands and compliance with standards, legislation and best practices, it is widely accepted that information is power and those who are aware of it, have access to it and use it to perform their work, end up with some competitive advantage. Information empowers people to perform better in various ways.

It is against this background that Grade R practitioners are considered to have a significant role in uplifting and transforming our society and are, therefore, viewed as contributors to our long-term human capital investment (ECD learners). ECD practitioners have the responsibility of teaching and developing a solid foundation for schooling. They are the main source of information, knowledge and values for children to meet their holistic development at a very tender age. Moreover, they are expected to offer quality service in child development to ensure that quality learners are ready to start their 12-year journey of basic education. Therefore, studying their information-seeking behaviour in order to design appropriate information service is considered as a positive step towards a long-term project in this sector, which happens to be a national priority.

### 1.3 Research problem

This study seeks to determine and understand the information needs and information-seeking behaviour of Grade R Practitioners in Ekurhuleni so that the EMM Libraries can design and implement information services that may help to empower its ECD practitioners. The study poses the following critical research questions informed by the Leckie, Pettigrew and Sylvain (1996) general model of information seeking of professionals.

#### 1.3.1 Research questions

- a. Which work roles, responsibilities and tasks do Grade R practitioners in the EMM have?
- b. What are the characteristics of information needs for Grade R practitioner in the EMM?
- c. Which information sources do Grade R practitioners prefer and often use?
- d. Which strategies do these practitioners often use to search for and access information?
- e. What factors inhibit Grade R practitioners from accessing information?
- f. Which information services do Grade R practitioners in the EMM require?

### 1.4 Significance of the study

It is evident from the literature that some research has been conducted on ECD both locally and internationally, in particular on social development, education and health covering a wide range of topics. There is extensive literature covering theoretical frameworks on User Studies with reference to information needs and information-seeking behaviour of other professionals in the work contexts. A few examples are Du Preez's 2008 study on 'Information needs and information-seeking behaviour of consulting engineers: qualitative investigation' and a recent study by Bitso (2011) that investigated the information needs and information-seeking patterns of secondary level geography teachers in Lesotho to guide the design and implementation of an information service for these teachers. Table 2.1 in chapter 2 include more examples of studies that investigated information-seeking behaviour of professionals applicable to other groups. There are, however, no studies on the information needs and information-seeking behaviour of Grade R practitioners. It is clearly this knowledge gap that justifies a need for this study.

The government of South Africa introduced the *Batho Pele* ('People First') White Paper in 1997 with eight principles from which all the departments and municipalities draw as part of their operational culture to improve service delivery (Mofolo & Smith, 2009:432). As a public servant in the EMM, charged with responsibilities related to strategy, planning, research and performance reporting, it is imperative that the researcher conducts a study that does not only inform practice in the EMM, but also supports educational initiatives and upholds the *Batho Pele* ethos. It is, therefore, in the spirit of these ethos that librarians and information professionals in the twenty-first century should not dictate nor impose on our clients or customers, information services not founded on research informed by them. It is anticipated that this study will greatly assist policy makers, decision makers and programme implementers, particularly those involved in providing training to future researchers to understand the information needs and information seeking behaviour from the perspective of the Grade R practitioner in Ekurhuleni and plan information services in accordance with their needs. Of utmost importance, is that the study findings will assist EMM to design information services are relevant and respond to the needs of the Grade R practitioners so that there is effective service delivery.

### 1.5 Limitations and delimitations

The population sample was drawn from Grade R practitioners who are employed in schools and ECD centres registered with the Gauteng Department of Education in Ekurhuleni. Although the focus group schedule was in English, in two of the sessions held with community and homebased practitioners, participants were comfortable with and preferred to use their vernacular, isiZulu, North and South Sotho. Although the researcher's home language is Setswana, he/she can understand all Sotho languages. However, it posed a challenge resulting into some focus group sessions taking longer than anticipated because the researcher had to try simplifying the questions. Moreover, the transcription of the audio recording took longer where there were language barriers.

As indicated earlier, the literature clearly points out that some information needs are unrecognised, unexpressed and dormant (Devadason & Lingam, 1997:41; Shenton, 2007:488). According to Herman and Nicholas (2010:248), 'dormant information needs' that are not recognised nor expressed, requires unearthing through research designs such as ethnography. Given the resources

such as time and finances for this study, it was not possible to conduct an ethnographic study to unearth the dormant and unexpressed needs. Another limitation of this study is that it is informed only by information needs expressed by the practitioners.

The sample size of the study is also a limitation given that 50 out of 520 ECD centres participated in the study. However, since the study is an interpretive, qualitative case study; the numbers do not matter that much (Choemprayong and Wildemuth 2009:52-55) . The most important thing is the rich insights that were shared by the participants even though the findings of the study cannot be generalised.

Tan (2016:82) points out that bias in qualitative research is inevitable and remains a challenged faced by researchers in study design, implementation and analysis. The researcher was mindful of the fact that given his position and the connections to the study, any conflicts of interest or existing beliefs and expectations from the study may distort facts and affects the validity and reliability of findings. To avoid bias, the researcher strived for objectivity and remained as neutral as possible during the selection of participants, interpretation and analysis of data.

## 1.6 Definition of concepts

The aim of this section is to introduce key concepts and their definitions that form the conceptual framework and scholarly foundation of the study. It is not always that there is a clear-cut definition of concepts used (Mouton, 2012:123). Similar to ‘information needs’ and ‘information-seeking’ based on literature surveyed; various scholars used the same concepts in their previous studies and articles with different definitions and interpretations. Therefore, it is important to clarify them in the context of this study. To avoid repetition, concepts related to information needs and information-seeking behaviour were introduced earlier and are discussed in more detail in chapter two.

### 1.6.1 Early childhood development

The South African definition of ECD refers to a comprehensive approach to policies and programmes for children from birth to nine years of age. These programmes include growing and thriving physically, mentally, emotionally, morally and socially, with active participation of their parents and caregivers (Department of Education, 2001:01). The definition further unpacks the roles and responsibilities of other key role players as follows:

- The national Department of Education is responsible for the 5 to 9 year olds;
- The Department of Social Development is focused on the birth to 4 year olds; and
- The Department of Health covers birth to 9 year olds.

This study focuses on the practitioners teaching children between 5 and 6 years old registered in Grade R in the Ekurhuleni Municipality.

### 1.6.2 Early childhood development centre

An ECD centre refers to

any building or premises maintained or used, whether or not for gain, for the admission, protection and temporary or partial care of more than six children away from their parents. Depending on registration, an ECD centre can admit babies, toddlers and/or pre-school aged children.

The term ECD centre can refer to a ‘crèche, day care centre for young children, a playgroup, a pre-school, after school care’ etc. ECD centres are sometimes referred to as ECD sites (Department of Social Development & United Nations Children’s Fund, 2006:06).

Williams and Samuels (2001: 22) define an ‘ECD site as any public or private, formal or informal location wherein ECD services are offered to groups of six or more learners’.

An ECD centre refers ‘to the delivery of ECD services through a range of models of service provision categorised into three institutions namely, non-governmental organisation (NGO), community and home-based facility, independent or private sites and public (primary schools) suited to meeting the specific age and developmental needs of children within a geographic area’ (Department of Education, 2001:02).

For the purpose of this study, an alternative definition incorporating both terms ‘centre’ and ‘site’ defines an ECD centre as a registered centre with the Gauteng Department of Education established to provide pre-school and pre-primary education with educational focus for children prior to statutory school going age.

### 1.6.3 Early childhood development practitioners

According to the Department of Social Development and the United Nations Children’s Fund (2006:08), the term ‘practitioner refers to all ‘ECD education and training development practitioners, such as, educators, trainers, facilitators, lecturers, caregivers and development officers’, including those qualified by their experience, and who are involved in providing services in homes, centres and schools. In relation to educators and trainers, the term includes both formally and informally trained individuals providing an educational service in ECD.

The National ECD policy refers to a practitioner as ‘staff providing ECD services through formal ECD centre services, family services and playgroups and training, as well as those providing management support services to these workers’ (Department of Social Development, 2015:01).

### 1.6.4 Early childhood development programme

Berry, Jamieson and James (2011:17) define an ‘ECD programme as a schedule, a learning programme or curriculum’. An ECD programme is a planned programme structured within an ECD service providing learning and support to children from zero to school-going age (Kemmes, 2013: xvi).

## 1.7 Research report outline

### 1.7.1 Preliminary pages

Preliminary pages include dissertation title page, declaration, dedication, acknowledgements, an abstract and keywords, table of contents, list of tables and figures.

### Chapter 1: Introduction and background to the study

This chapter presents the introduction and background to the study, research problem and questions; significance of the study, clarification of key concepts; limitations and delimitations.

### Chapter 2: Theoretical framework and literature review

This chapter presents the theoretical framework for the study as well as the literature review. It unpacks further the major concepts introduced in chapter one particularly those related to the research questions.

### Chapter 3: Research design and methodology

The chapter explains the research design, methodology and data gathering process used in conducting the study including information about the population, and sampling procedure.

### Chapter 4: Data analysis and interpretation

This chapter provides an analysis and interpretation of the data.

### Chapter 5: Findings, conclusions and recommendations

The final chapter reports the findings, draws conclusions based on both the theoretical empirical data, as well as practical implications of the study, and makes relevant recommendations.

## 1.8 Conclusion

Chapter one introduced the reader to the study by providing the background, overview of ECD in South Africa, background to the research problem, research questions, significance of the study, the limitations and delimitations as well as the layout of the dissertation. The chapter also clarified definitions and interpretation of key concepts used in the study. The next chapter covers the theoretical framework and literature review.

## CHAPTER 2

### THEORETICAL FRAMEWORK AND LITERATURE REVIEW

#### 2.1 Introduction

This chapter commences by discussing the theoretical framework and its role in research; it describes the difference between an information behaviour model and theory; and facilitates a deeper understanding of information behaviour models. In it, some of the existing general models of information behaviour are reviewed and components of the Leckie, Pettigrew and Sylvain (1996) general model of information seeking of professionals (GMISP) as the theoretical framework for the study is described. Because this study is about the information-seeking behaviour of Grade R practitioners at the workplace, the following key themes are discussed to gain insights that inform the design of the research instruments and help generate sub-themes and codes to be used to analyse and interpret data:

- information needs,
- information-seeking behaviour,
- information sources,
- work roles, and
- factors that affect information-seeking.

Furthermore, the chapter examines the research methods commonly employed to investigate information needs and seeking behaviour to inform the most suitable research methodology for the study.

#### 2.2 Theoretical framework

The term ‘theoretical framework’ when used in research relates to a decision that informs a plan, or the ‘lens’ that guides the research process (Maxwell, 2013:39). Apart from providing a plan for the study, the usefulness of a theoretical framework is to guide the design of the research instrument, data collection, analysis and interpretation as well as to assist with a deeper understanding of the research findings (Ngulube, Mathipa & Gumbo, 2015:43). In order to approach a research study scientifically, it is important for the researcher to link the study to the theory or model and substantiate how the theory or the model frames the study. The Leckie,

Pettigrew and Sylvain (1996) general model of information-seeking of professionals (GMISP) was adopted as an appropriate and helpful theoretical framework in order to gain an understanding of the research problem, formulate the research questions, guide the design of the research instruments and decide on the research methods to conduct this study.

### 2.2.1 Information behaviour models vis-à-vis theories

According to Case (2012:134–135) ‘information behaviour models define a framework for rational and thoughtful thinking about a problem in a form of statements and diagrams to explain information-seeking activities’. The use of information behaviour models helped researchers to visualise an organised structure to guide their investigations and to study human information behaviour activities (Wilson, 1999:250). Information-behaviour models do not, therefore, represent a theory, but explain the relationships of concepts used to structure, sequence and impact or influence human behaviour during the process of information-seeking (Robson & Robinson, 2013:169).

A theory is defined as ‘a set of statements or principles which explains a relationship between a cause and effect amongst a group of observed facts, often established over time and place’ (Case, 2012:167; Koh, 2013:33). The significance of a theory is to help researchers better understand how and why other scholars have approached or carried out their investigations in the way they did. It also explains relationships amongst phenomena by providing structure to the research design (Ngulube, Mathipa & Gumbo, 2015:45–46). Theory has a significant role in research and must strive to contribute towards further development of theories at all times — because research results that do not lead to theory development, testing or modification have limited usefulness (Koh, 2013:33; Lor 2014:30). Nonetheless, it is acknowledged that theory takes time and effort to develop because it needs to be proven and tested by other research studies over time and in different settings.

Lor (2014:26), Kumasi, Charbonneau and Walster (2013:175) argue that, in comparison with other social science disciplines, the library and information science (LIS) discipline lacks established theories; it is yet to develop a theory of its own. Ngulube, Mathipa and Gumbo (2015) observe that

the current research environment provides an opportunity and space for the LIS discipline profession to progress from information-behaviour conceptual models to theory, by taking advantage of borrowing theory from other disciplines such as communication, education and psychology and building on it. While waiting for theories to develop or existing models to mature into theories, research could be guided by models (Case, 2012; Kumasi, Charbonneau & Walster, 2013; Lor, 2014). Albright (2010:98) concurs with the view that the LIS discipline must demonstrate ‘scholarly maturity’ by moving away from concepts and models to information behaviour theory. One recognises the work of Dervin (1998), whose Sense-making theory ‘is regarded as a general information behaviour theory borrowed from cognitive psychology a discipline outside LIS’. The use of theory from other disciplines provides an opportunity to enhance scholarly knowledge in understanding information behaviour. Considering that there are contemporary information behaviour-related areas not explored and covered by existing theories, conducting further research in this area provides an opportunity to close the gap. For instance, the information-seeking and communication model (ISCM) of Robson and Robinson (2015) is an attempt to address concerns that the LIS discipline fails to come up with new or build on existing information behaviour models. The ISCM model was built on existing models from LIS and Communication Studies, to encompass ways in which we can seek, use and communicate information and its practical application has been tested.

It is not the intention of this study to recommend a new conceptual model or theory; but to draw upon an existing information-behaviour model to investigate and understand the information-seeking behaviour of Grade R practitioners in order to recommend appropriate information services for this particular user group.

### 2.2.2 The use of information behaviour models as theoretical frameworks

González-Turuel and Abad-Garcia (2012:31–36) argue that research on information needs and human information behaviour is grounded on ‘theoretical proposals, assumptions, beliefs and models’. A perusal of the literature reveals that there are various models on information needs, information seeking, information searching and information retrieval that may possibly have some bearing on this study. These models focused on various situations, such as everyday life

information-seeking behaviour (McKenzie 2003:19–40), and work-related environments (e.g., Engineering, Education, and Health.). Given the existing literature on information-behaviour models, one cannot conduct a study in this area without using one of the models as a theoretical framework (Bitso & Fourie, 2012:01). Although information-seeking behaviour research has been conducted for over half a century, it is acknowledged that it has yielded models which have not yet evolved into fully-fledged theories and are still in a modelling stage (Kumasi, Charbonneau & Walster, 2013:175–176; Koh, 2013:33; Green, 2014:35; Lor, 2014:30; Robson & Robinson, 2015:02). Nevertheless, Case (2012) recommends researchers to use the existing models as theoretical frameworks while waiting for them to mature into theories.

As indicated earlier, the use of a theoretical framework is a methodological necessity that helps to give direction, especially when employed in qualitative research. It also offers a plan for qualitative data collection and a tool for analysing data and interpretation of findings (Evans et al, 2011:278; Ngulube, Mathipa & Gumbo, 2015:57). Many information-seeking behaviour models were developed in the 1980s to early 2000s by scholars such as Byström and Järvelin (1995), Dervin (1998), Ellis (1989, 1993), Ingwersen (1996), Kuhlthau (1991, 1993, 2004), Leckie, Pettigrew, and Sylvain (1996), Savolainen (1995) and Wilson (1981, 1999, 2000). The literature highlights the growing acceptance of a number of models developed between 2003 and 2013 that used the old models as theoretical frameworks to bring new aspects in information- behaviour research. These include the integration of information-seeking behaviour models with communication models done by Robson and Robinson (2013, 2015), as well as the modification of Wilson’s model by Niedwiedzka (2003) that emphasises the role of information intermediaries.

### 2.2.3 The general model of information-seeking of professionals (GMISP)

Leckie, Pettigrew and Sylvain’s 1996 general model of information seeking of professionals was chosen as the theoretical framework to test the practical application and explore the information-seeking behaviour of ECD practitioners. This model was developed because of an investigation related to the seeking of information in professions like law, health and engineering. The works of researchers such as Bitso (2011) and Baker (2004) proved that the model is applicable to professionals and paraprofessionals working in a formal or an informal setting. As noted by Bitso

(2011), the researcher’s choice of this model was informed by its simplicity and credibility, given that it has been widely cited and tested to describe and explain the information-seeking behaviour of professionals in general including para-professionals. The model considers context specific situations, various other work responsibilities and roles as key factors influencing the information-seeking activities (Case, 2012:134). As it is called, the GMISP model allows its applications by any study that wants to use the model to investigate information-seeking behaviour within a diverse professional work context. Figure 2.1, below, is a pictorial representation of the information seeking of professionals (Leckie, Pettigrew & Sylvain, 1996:180).

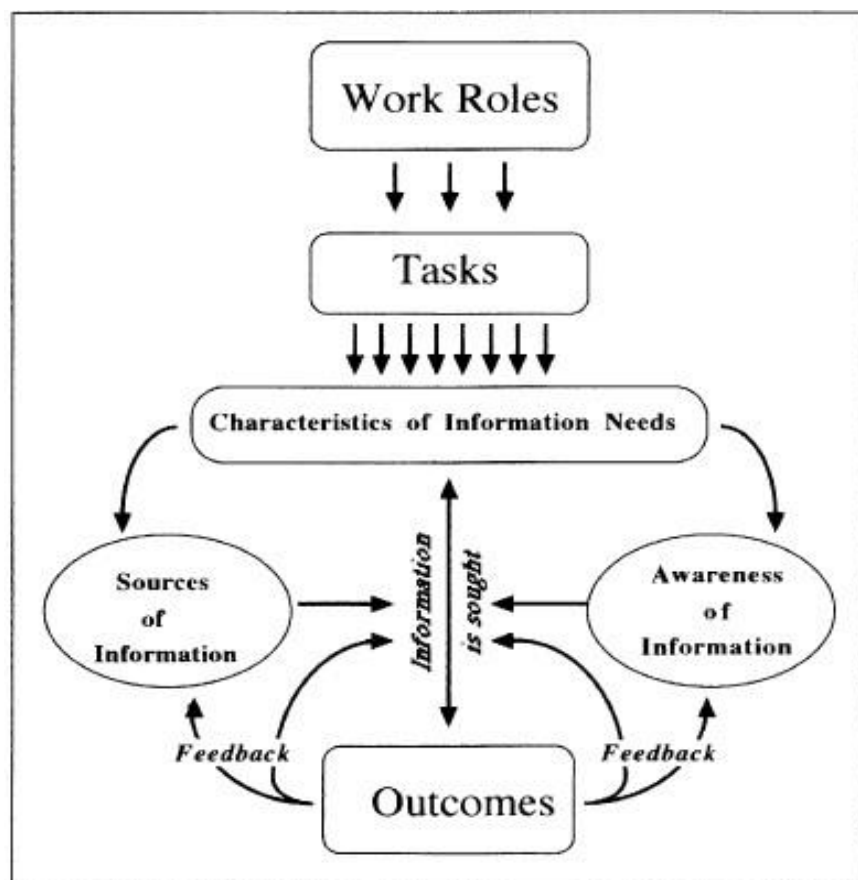


Figure 2.1: A model of the information seeking of professionals (Leckie, Pettigrew & Sylvain, 1996:180)

The model also emphasises that, despite one’s professional background, there are six common information stages, activities or patterns identified that emerged amongst different professional groups during information-seeking process, as part of an individual work position, regardless of

the field of expertise. A professional assumes a number of complex and different work roles, such as that of administrator or manager, service provider, counsellor, educator, student and researcher. Secondly, these roles have a group of tasks associated with them. Thirdly, individual professional tasks required for each role triggers the information needs of various characteristics depending on things such as urgency of information need, familiarity of the information sources, the educational background of the person in need of information and the availability of information sources. Fourthly, the model takes cognisance of factors that may either inhibit or facilitate the finding and use of information to perform a specific task, such as an individual's status in an organisation, prior knowledge of the information need, availability and accessibility of information sources as well as awareness of information sources and familiarity with the information need and task. Lastly, the outcome, which is the end result of an act of searching for information resulting in a successful conclusion in searching and the completion of tasks or a recognition of the fact that further information is needed to complete the tasks through a feedback loop. It is at this stage at which the user decides whether his or her information need has been met to complete a task, hence the search process may be repeated, depending on things such as the urgency of the information need and the motivation of the information seeker (Leckie, Pettigrew & Sylvain, 1996:180–187).

Following the Leckie, Pettigrew and Sylvain (1996) components of the GMISP model, the specific stages and the process as presented by this theoretical framework were found to be helpful to describe information needs and information-seeking practices of Grade R practitioners in the EMM. Bitso (2011) concurs that the model helped her to realise that information seeking and related practices might be similar across professions, irrespective of disciplines as long as they have common work roles and associated tasks.

#### 2.2.4 The use of GMISP as a theoretical framework

This section briefly reviews literature on studies that used the GMISP as a theoretical framework. Du Preez and Fourie (2010) used GMISP as a theoretical framework and found that engineers' sources of information relied on people, personal files and personal knowledge for information needed during the initial stage of the project and in the final stage of the project. Bitso (2011) identified three work roles that triggered the information needs and seeking behaviour of

Geography teachers, i.e. educator's role, administrator's role and non-academic role, particularly serving in committees. Information sources preferred by teachers were textbooks, colleagues and syllabus documents. Zinn (2012) established that there is a dire need for or shortage of library and information services in schools. She recommends that information literacy education should form part of pre-service teacher training and practicing teachers should receive effective information literacy training.

Internationally, there is a growing interest and progress by LIS researchers to study various professional occupations particularly their information-seeking behaviour while expanding on the GMISP as a theoretical framework. This was evident in the number of analysis done by various academics reviewing research that was carried out on information behaviour in their respective countries (González-Turuel & Abad-Garcia, 2012). The strengths of the GMISP model is that its general components accommodate different professions in work environments, thus allowing the model to be relevant and tested by anyone interested to conduct information behaviour research amongst different professions and non-professionals alike (Bitso, 2011). This is evident, considering that the model has been widely applied and validated by a number of studies. The model was refined by Wilkinson (2001:257) to 'explicitly include the organisational context and demographic characteristics linked to the awareness of information sources and selection of the sources'. McKenzie (2002:19) argued that there are some gaps or limitation of the existing work place information-seeking behaviour models, because such models only focused on active information seeking and neglect less-directed practices or everyday information seeking. Widén, Steinerová, and Voisey (2014:98–104) advocate for an integrated and multi-disciplinary approach in research in order to understand today's information behaviour in the work place. This argument could be valid, given that some of the existing workplace information-seeking behaviour models are old and evolved from research that focused on a single dimension of information seeking. Bearing in mind that the current work place information-seeking environment is complex because of digitisation and technological advancement, more multi-disciplinary, integrated and multi-dimensional approaches that address the limitations of the existing conceptual frameworks should be considered. The aim of this study is not to come up with a new model, or to use multi-disciplinary approaches; it is rather to use the existing model to determine the information needs and information-seeking behaviour of Grade R practitioners.

Table 2.1 below gives a selective chronological summary of studies that investigated information-seeking behaviour of professionals applicable to other groups; not limited to teachers using GMISP as theoretical framework. Even though some studies indicated that they used this model as a theoretical framework, one finds that there is not much evidence that shows how the model was used.

Table 2.1: A summary of studies that investigated information-seeking behaviour of professionals

Authors	Target Group	Focus	Research methods	Major Findings
Robson and Robinson (2015)	Health care professionals, physicians, and Information providers in pharmaceutical companies and the National Institute for Health and Care Excellence(NICE) in the U.K.	Information-seeking and communication model (ISCM) on information-seeking and acquisition, use of information and communication.	Interviews and literature review.	LIS profession fails to come up with new — or build on — existing information behaviour models. It proposes a new model built on existing models from LIS and Communication Studies that encompass ways in which we seek, use and communicate information.
Shipman, Bannon and Nunes-Bufford (2015)	Teachers	Information-seeking behaviour of in-service educators before and after library instruction programmes.	Survey method, including both qualitative and quantitative data.	In-service educators commonly used a broad range of information resources; i.e. websites are frequently used, library on-line databases and co-workers are used for information more than to search a database. Results indicate that ERIC, journals and government publications are less used. The findings also show that the primary purpose why educators seek information is for writing lessons and developing project and action research.
Adewale and Mansor (2014)	Lawyers	Information sources used by lawyers for task-related activities, particularly understanding sources that are consulted by lawyers in Nigeria for specific job-related tasks.	Survey research design, s together with random sampling and data, was collected using a questionnaire.	The frequency of the use of an information source by lawyers is influenced by the tasks they perform. Also, the demographic profiles, in particular the following variables i.e. education level, gender, area of specialisation and tasks, influence information-seeking and information channels
Anderson (2013)	Teachers	Preparing the next generation of early childhood teacher; the emerging role of interprofessional education and	Qualitative pilot study.	Although this study did not use any specific GMISP as a theoretical framework, its findings are nevertheless significant. There is lack of role clarification amongst 2 <sup>nd</sup> year students studying

Authors	Target Group	Focus	Research methods	Major Findings
		collaboration in teacher education.		pre-service ECD, graduate and social worker students and advocates for inter-professional collaboration, information sharing or information exchange across other professional disciplines to support optimal early childhood outcomes.
Tanni (2012)	Trainee teachers	Information acquisition in the context of a task, the use of information-seeking channels and sources during lesson planning.	Semi-structured individual interviews; questions and classroom observations.	Using the task-based theoretical framework, the findings of this study address the information channels and sources that trainee teacher's use and the modes of information acquisitions in the context of lesson planning.
Zinn (2012)	Teachers	Information literacy in the classroom; assessing the competency in information literacy education of Western Cape teachers.	Purposive sampling using a mixed methods approach — both qualitative and quantitative data collection methods were used. Pre- and post-course questionnaire, journals, interviews and assignment artefacts formed part of the data.	A dire need for or shortage of library and information services in schools and recommends that information literacy education should form part of pre-service teacher training and practising teachers to receive effective information literacy training.
Bitso (2011)	In-service Geography teachers	'Information needs and information-seeking patterns of secondary level geography teachers in Lesotho to guide the design and implementation of an information service for these teachers.'	Triangulation was used to collect data from in-service Geography teachers using focus groups discussions, pre-service Geography teachers using questionnaires and from other stakeholders involved in	The study identified three work roles that trigger information needs and information-seeking behaviours of Geography teachers, i.e. educator's role, administrator's role and non-academic role. Information sources preferred by teachers are textbooks, colleagues and syllabus documents.

Authors	Target Group	Focus	Research methods	Major Findings
			Geography education through interviews.	
Fourie (2010)	Healthcare professionals, patients and families in palliative cancer care	'Information behaviour of patients, families and health care professionals in palliative cancer care.'	Exploratory study using semi structured interviews at a private hospital.	Revealed different information needs between health care professionals, patients and the families of patients diagnosed with cancer.  Recommends the role of libraries to support information dissemination among families, patients and health care professionals.
Du Preez and Fourie (2009)	Consulting engineers	Information behaviour of consulting engineers as information users in South Africa when performing their professional tasks during engineering projects.	Qualitative study through semi structured timeline interviews.	Engineers' relied on people, personal files, personal knowledge for information during the initial stage of the project and, in the final stage of the project, information comes from the project Itself.

## 2.3 Information needs

Teachers depend on information to carry out their teaching tasks and everyday life activities; this results into information needs that present a desire to find information (Bitso, 2013:346).

According to Taylor's (1968:179–181) there are different types of information needs such as:

a visceral need, conscious need, formalised and compromised need. Information needs may be internally or externally prompted, expressed or unexpressed; they may also be cognitive needs (to learn new skill) or affective needs (emotional); or prompted by a need to solve a problem or make a decision (Case, 2012).

Dervin and Nilans (1986) allude to the 'gap theory'; Kuhlthau (1993) to the uncertainty concept and Belkin (1978) to the anomalous state of knowledge'. These are concepts that highlight the point that there must be a motivating factor that forces one to seek information. Taylor (1968) emphasises that it is often difficult to express information needs and for people to move from the feeling that they need information to the exact query formulation and ultimate acquisition of information. To establish some of the unexpressed information needs, a key informant from the EMM Department of Health and Social Development was interviewed. Based on this argument, it was envisaged that the key informant would help to find out if the Grade R practitioners have information needs that are cognitive, physiological or emotional as alluded to in the literature.

### 2.3.1 Information needs of ECD practitioners

An examination of the literature reviewed reveals that no research studies have been conducted to investigate information needs of ECD practitioners in South Africa. In their research study, Diekema and Olsen (2014:2261) increased our understanding of the 'school as information ecology', implying that the teaching profession is an information-rich profession. However, it remains one of the under-studied user groups. With this background in mind, the understanding of context, both the environment and personal factors such as location, socio-economic status, culture, employment status, level of education, and psychological factors in which information needs arise are embedded in the ECD practitioner's daily professional activities is very significant (Leckie, Pettigrew & Sylvain, 1996:181). Different settings will dictate and trigger different information needs. For example, ECD practitioners operating in private sites (independent schools) will have different information needs to those operating in government sites (public schools) and in home-based ECD centres (NGOs).

An examination of the literature review revealed that the following studies represent a sample of those that investigated the information needs of teachers in South Africa and in other different parts of the world. Pretorius's 1994 study investigated the 'information needs of Biology teachers in Bloemfontein'. A study was conducted by Oosthuizen (1997) on the information needs of the teachers in Orange Farm, an informal settlement in Johannesburg. Heyns's 2002 study examined the information needs of Afrikaans first-language teachers. These studies did not use any of the conceptual or theoretical frameworks, as probably in the past institutions did not put much emphasis on theory in research. Lately, there seems to be a paradigm shift towards emphasis on theory in research, especially in traditional research intensive institutions such as the University of Cape Town.

Summers, Conry and Matheson (1984:126) investigated the relationship between education position and purpose in information seeking and the sources used by Canadian educators from one province. They found that amongst five positions or work group of educators out of 15 categories of needs, the most common information needs for elementary teachers and support staff was to address the following gaps in the work context:

- (a) finding new materials,
- (b) facts for classroom,
- (c) awareness of trends and
- (d) teaching techniques.

Shafique and Mahmood (2013:26) reviewed research studies investigating information-seeking behaviour and information needs of educational administrators and other stakeholders in an education sector in Pakistan. They found that the information needs of educational administrators are to perform routine tasks such as planning and budgeting. This section has provided some ideas related to teachers' information needs, which one will have to investigate among Grade R practitioners.

### 2.3.2 Work roles of ECD practitioners in South Africa

The new Curriculum Assessment Policy Statement (CAPS) for the foundation phase implemented for the first time in 2014, highlight the fact that Grade R practitioners had to adapt to new teaching roles to integrate the learning areas and activities (Department of Basic Education, 2013:01). As pointed out in chapter one the education sector experienced a period of change in democratic South Africa, with an emphasis being on ECD programmes. Clasquin-

Johnson (2011:1–4) highlights that these changes and other demands led Grade R practitioners' work role and tasks to be more 'complex coupled with unrealistic social demands from parents and [the] public at large'. According to Govindasamy (2010:115), the majority of ECD practitioners in South Africa have low qualifications and are studying to increase their knowledge in the ECD sector.

The work roles and responsibilities of an ECD practitioner can be classified at various levels, such as being a manager and a teacher. As a supervisor, principal, centre manager, or head of department it incorporates the following roles and responsibilities:

- to coordinate and promote quality ECD education and care;
- to manage the operations of ECD centres and learning programmes therein;
- to ensure that staff is satisfied and their job descriptions have clear roles and responsibilities; and
- to ensure that ECD practitioners continue to receive ongoing training in ECD management programmes which is a key aspect to increase the knowledge of practitioners and improve the quality of teaching (Department of Social Development, 2006: 40–54).

Chikutuma (2013:25) concurs that 'good management and organisation of ECD facilities constitutes quality learning environment which is strongly correlated with high performance in school work'. For a teacher and practitioner specific classroom roles and responsibilities incorporate focusing on the management of their own classrooms. This includes planning, organising, directing and controlling, keeping and maintaining class records, assessing and observing children's progress, protecting and looking after children's safety, moulding the behaviour of children, developing children holistically including children with disabilities and learning challenges. ECD practitioners must be equipped with counselling skills, because they are the second if not the first people to be in contact with learners and their parents when they are faced with difficulties. Lastly, they are expected to participate in extra-curriculum activities (Department of Social Development, 2006: 40–54). As discussed above, it is clear that the type of information needs required by ECD practitioners will differ, depending on their work roles and the task complexity influenced by other characteristics and contextual factors.

This could be the reason why an ECD practitioner feels uncertain of, and inadequate to perform, the task of implementing the new curriculum. It reaffirms the research questions that the professional daily work presents itself with information gaps that may translate into

information seeking. In addition, Clasquin-Johnson (2011:1–4) indicates that professional development seldom addresses and enables ECD practitioners to cope with rapid change in education and unrealistic pressure of societal demands which is an extension of the teaching role. It must be noted that this study broadly recognises the environmental context, physical, social and technological context that is fundamental to understanding information-seeking behaviour.

## 2.4 Information-seeking

### 2.4.1 Information-seeking of ECD practitioners

As indicated, the literature review presented a number of models that have been used to explain the information-seeking behaviour of professionals. These models emphasised the point that information-seeking is prompted by a need to satisfy a goal. The purposive or goal directed behaviour is therefore action-oriented; initiated by an individual followed by activities. A decision to look for information is influenced by contextual factors, the nature of information needs, personal attributes of the information seeker, and characteristics of information sources. As explained by Leckie, Pettigrew and Sylvain (1996), the success of information-seeking could be determined by evidence of use of the information to carry out an action or a task to make informed decision or achieve a goal.

### 2.4.2 Factors that affect the information seeking of ECD practitioners

Leckie, Pettigrew and Sylvain (1996:182–183) point out that there are important factors that are generally considered to affect information-seeking behaviour in the work place, namely, characteristics of information sources, cognition, individual characteristics, environment and demographics of the user that could be education, culture, age and gender. Shafique and Mahmood (2013:26) mention some common points that affect professionals' information-seeking behaviour, such as educational level of the user, information-searching skills needed to get the information source available and the time available for the user. ECD practitioners are, therefore, required to learn and be equipped with information-seeking and technology skills to be competent problem solvers, be able to evaluate the relevance and locate information sources in any format in their professional practice (Shipman, Bannon & Nunes-Bufford 2015:121).

### 2.4.3 ECD practitioners' barriers to information-seeking

The analysis of the literature reviewed identified a number of barriers commonly applicable to information seeking for professionals and the intensities of barriers that differ from country to country and user groups studied (Du Preez & Fourie, 2010:14; Davis, 2007:78–79; Clarke et al, 2013:186). The following are the most cited barriers to information-seeking:

- (a) A lack of financial resources limits and prevents users to purchase and access information, using internet and other forms of information resources. This includes the lack of money to purchase internet data. The cost of data has been reported to be very high in South Africa in comparison with the rest of the African continent. In the context of this study, the cost of establishing a library or dedicated information resources platform for ECD practitioners may be difficult to justify in the absence of conclusive evidence.
- (b) Individuals' inability to identify and express the information need, such as how to deal with dormant information needs; how to express and articulate information needs required to be able to search for information and consult relevant and authentic information sources.
- (c) Lack of basic IT and computer skills have been attributed to certain user groups from using various forms of ICT. This includes the rise in the use of the internet, mobile devices and online education databases. Lack of competencies and computer illiteracy are challenges, especially in the digital era. Related to this point is the poor infrastructure for information technology, such as narrow bandwidth.
- (d) Information illiteracy is a barrier to information seeking, as is a lack of information retrieval and search skills, and an inability to formulate appropriate search terms and strategies.
- (e) A lack of awareness, availability, the knowledge and identification of relevant information sources: simply not knowing where to find information when in need of information and faced with a complex task or a problem.
- (f) Physical access, lack of ICT infrastructure and poor bandwidth.

According to Mamafha, Ngulube and Ndwandwe (2014:05) in a study investigating the utilisation of information and communication technologies at the Ekurhuleni Metropolitan Municipality' such as computer, faxes, internet in public libraries found that despite libraries

being equipped with various ICT equipment's/infrastructure, restrictive library policies are a barrier and challenge to many users.

Davies (2007:24) posits that lack of time available to search for information can be a barrier to information seeking, considering the amount of information available at our disposal. Not having the necessary search and information retrieval skills also poses as a key barrier, it might take longer for someone not familiar with information sources to select relevant sources. This may ultimately affect the response time to search the required information effectively and timeously. In a study investigating information needs and information-seeking behaviour analysis of primary care physicians and nurses, Clarke et al (2013:186) identified geographic location as barrier for accessing information sources. This might apply to those centres that do not have resource centres or libraries, for this compels the ECD practitioners to make time from their busy work schedule to go the library. Education level and language are some of the barriers cited by a number of studies that observed that content of information, if too complex, can inhibit the process, especially if the user is not comprehending what they are reading. The assumption is that if ECD practitioners have low educational status, they will find it difficult to initiate an information-seeking enquiry. The research focus of the study is to identify Grade R practitioners expressed information needs, including the factors that inhibit or act as barriers for Grade R practitioners to access information to make decision and solve a problem. Therefore, this literature has shed light on what to expect from Grade R practitioners in the EMM.

## 2.5 Information sources

### 2.5.1 Information sources preferred by ECD Practitioners

The research question seeks to understand which information sources Grade R practitioners prefer and use often to meet the information needs to perform specific roles and tasks. In addition, the objective of this study is to understand the reasons why ECD practitioners prefer certain information sources over others. The researcher is aware that current trends within the information environment, sources and channels have brought new opportunities and challenges in response to users' information needs and information-seeking behaviour. The role of information technology (IT) and the complexity of publications has brought some innovations an improved access to information sources. Bates (2010:2381) highlights the point that new

modern technology affects information-seeking behaviour simply because we commit little effort to seek information due to popularity of internet as an information source.

The use of information sources to perform professional daily tasks activities effectively is influenced by an individual knowledge and awareness of various sources. As a result, it affects the manner in which the information-seeking process takes place, that is, interaction with information sources (Leckie, Pettigrew & Sylvain, 1996:183–184). ECD practitioners must be fully aware and have good knowledge of information sources and organisations that provide services to address their information needs to be in a position to communicate their choices and preferences. Information carriers may include variety of information channels, information sources and messages such as: (a) primary or secondary, (b) written or oral and personal.

Byström (2002:582) also highlights that channels guide the information seeker to the information sources that are characterised by: (a) internal or external sources and (b) formal or informal sources.

There are four dimensions used to study information sources preference for educational administrators/managers, namely, contextual, situational, socio-cultural and informational (Shafique & Mahmood 2013:29).

The use of information sources preferred by teachers is similar to those found in the study conducted by Shipman, Bannon and Nunes-Bufford (2015:120). This found that information sources that in-service teachers used are the traditional information sources such as newspapers, magazines, textbooks, encyclopedias, online databases, internet, personal contacts, and reliance on colleagues. These findings are observed in a number of other information-behaviour research studies. When reviewing research studies conducted to investigate information needs and the information-seeking behaviour of educational administrators and other stakeholders in Pakistan, Shafique and Mahmood (2013:26) found that the importance of attending workshops, meetings, conferences, and seminars also served as platform to enlighten professionals about new developments and ideas in their work environment.

According to Bitso and Fourie (2011:186), the main sources of information utilised by teachers were the syllabus documents, books and colleagues. The study also found that newspapers and the television were also considered as sources of information. Heyns (2002:02) found that web-based sites like 'Ask Eric' and 'SchoolNet' in Canada were amongst the most popular and preferred information sources for teachers. Teachers therefore need the skills to navigate in the world of information overload to be able to perform their role and task efficiently. Oosthuizen (1997:233) contends that

If teachers know how, why and where to find information and use it, these skills will not only enhance their teaching for new curriculum, but will filter through the pupils and the community.

In emphasis, it is important for the ECD practitioners to understand the characteristics of credible and quality information sources and consider the advantages and disadvantages of both traditional print and online-based media format (Leckie, Pettigrew & Sylvain, 1996:180). Wilson (1997) perceives information sources' characteristics as important elements in particular quality, credibility and accessibility on the use of information sources. Information needs influenced by the roles and tasks dictates what type of information an ECD practitioner requires. Considering the impact of the information explosion in the information age, the medium in which information is presented has dramatically changed from the traditional paper-based format to electronic media. Information sources today are presented in a variety of media formats influenced by information communication technology (ICT). It is envisaged that this will affect the choice of information sources and information-seeking behaviour and ultimately have an implication for the design of an information system that will better serve the needs of ECD practitioners.

## 2.6 Common research methods for information needs and information-seeking studies

According to Devadason and Lingam (1997:44), in order to understand 'why' and 'how' individuals seek and use information there are guidelines and procedures to be followed that are often informed by theoretical frameworks. The extensive analysis of the literature review revealed that most of the original research studies used a variety of methods and techniques from the existing models to investigate information needs and information-seeking behaviour of professionals. The following research methods were identified as widely used to investigate information behaviour beyond information seeking for the convenience of most researchers:

- Surveys, most empirical studies reviewed either use self-administered questionnaires or personal interviews and semi-structured interviews with closed ended questions.

- Mixed methods research, although regarded as recent, their utilisation is growing. Most studies that used both qualitative and quantitative research methods indicated that they use these methods to triangulate and validate the reliability of collected data and the findings.
- Ethnography or observation method, very few studies used this method simply because it takes a great deal of effort and time to conduct.

In the literature reviewed, case studies appeared to be the most common research method utilised. Ellis (1993:469) supports this observation that there is a growing acceptance to involve small manageable focus groups to understand why and how people seek information, an alternative from studying big groups using traditional statistical survey and questionnaires. Simply put, one cannot describe people's experiences using numbers. In this case, data that are related to verbal expressions, feelings and thoughts were targeted. Therefore, for the purpose of this study, the interpretive qualitative case study was deemed an appropriate research method to use for the benefit of rich data. This will be discussed in detail in chapter three.

## 2.7 Conclusion

The literature review explained and clarified the role of the theoretical framework and the relationships between model and theory. This chapter gave a brief overview of existing models and provided the rationale to support the choice of Leckie, Pettigrew and Sylvain (1999) model as preferred theoretical framework in this study. A summary of studies that investigated information-seeking behaviour of professionals applicable to other professional groups and not limited to teachers using GMISP, as theoretical framework, were analysed because of their relevance in this study. The literature on significant themes and concepts arising from the research questions was reviewed. The chapter also looked into common research methodology used in information-seeking behaviour studies. The literature review process helped to confirm that in South Africa, at the time of conducting this research, no study had as yet been published on the information-seeking behaviour of ECD practitioners, therefore making this study unique and to lay a foundation for future literature reviews. The next chapter deals with the research methodology.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1. Introduction

In this chapter the research design and methods followed in this study are covered. The essence and approach of the research paradigm and perspective, the reasons for the preferred paradigm, and briefly explains the difference between qualitative and quantitative methods are also described. The research approach, research design, population, sampling strategy, data collection methods and qualitative data analysis are explained. The ethical considerations for the study are considered, as are the participants' rights and compliance with ethical protocol at relevant institutions need to borne in mind. Lastly, those aspects that are considered important and relevant to address data verification and the quality, integrity and trustworthiness of the study are discussed.

#### 3.2. Research paradigm

Maxwell (2013:42) argues that it is important to follow and use a 'well-known and reputable' paradigm position in research. This study is situated within the interpretivist research paradigm. Supported by a literature review on information behaviour research in South Africa in the 1980s to date, Stilwell (2010:08) indicates that most studies used methods and approaches that adopted a qualitative and interpretivist paradigm to analyse and interpret data collected using focus group discussions. Based on this argument, this research used an interpretivist paradigm, and data were collected using focus group discussions. The interpretivist research paradigm emphasises that people interpret in the way that they perceive and understand the world in which they operate and constantly try to understand it with meaning, which provides a base for a solution in a research project (Auriacombe & Noltzhausen, 2014:18).

In the context of this study, Leckie, Pettigrew and Sylvain's 1996 general model of the information-seeking of professionals was used as a theoretical framework. It described the information seeking methods of professionals at work, which is about understanding human beings' experiences and their behaviour, 'how they access and use information to execute their tasks and associated roles and responsibilities' (Leckie, Pettigrew & Sylvain, 1996:161).

It is against this backdrop that, while using an interpretivist paradigm through a case study and qualitative research approach, the researcher's broad understanding of the ECD practitioner's information-seeking behaviour is best understood. Moreover, the benefits of using an interpretivist paradigm is the richness associated with interpretation and the adequacy of the primary data that tends to be honest and constant thus offering a certain level of validity (Hussain, Elyas & Nasseef, 2013:2375). The researcher is, however, aware of the limitations of using an interpretivist paradigm, these being subjectivity and the fact that results cannot be generalised since the data collected is reliant on personal opinions and feelings.

### 3.3 Research approach

The research approach is considered as a research strategy that provides the logical structure required for the management of the entire research study (Ngulube, 2015:145). There are two types of research designs in research, namely, empirical and non-empirical. In practice, a case study can be used for both. Other strategies identified to collect data using an empirical approach include a survey, an experiment and ethnographic study. There are three main types of research approaches: qualitative, quantitative and mixed methods. The research problem and the nature of data dictate the choice of the research methods (Marshall & Rossman, 2016:2). If data is verbal or non-numerical, the method is qualitative and if data is numerical, or is quantitative (Marshall & Rossman, 2016:2). The mixed methods are a combination of non-numerical and numerical data in a single study, either concurrently or sequentially (Evans, Coon & Ume, 2011:276).

According to Ngulube (2015:145), appropriate research instruments and methods are key to answer the research questions, guide and control how data collection procedure and data analysis is done in the study. The research methods include data collection techniques and procedures, such as the use of focus groups, interviews and observation (Ngulube, 2015:146). This study, therefore, employed a qualitative research approach. The use of qualitative research is a well-established empirical approach; it remains useful when investigating human experiences and other social activities as opposed to collecting data statistically to explain people's experiences (Marshall & Rossman, 2016:1-2).

### 3.3.1. Research design

The study adopted the case study research design. According to Hussain, Elyas and Nasseef (2013:2376), a case study refers to ‘a research study that focuses on single case or cases, to a particular situation, an individual, group or an institution’. From the literature review conducted, it emerged that a case study is the commonly used method by LIS scholars dating back to as early as the 1980s, following an interest in the study of human information behaviour (Choemprayong & Wildemuth, 2009:51). Furthermore, Choemprayong and Wildemuth (2009:52–55) outline the relevance of case study design and caution against some of the limitations for selecting a case study method. Despite some hesitation, then, the case study design still plays a very important role in research because of the rich, in-depth data it often provides from a small sample that is studied in detail. It also helps to narrow the scope of the investigation by choosing the most relevant case that is a useful source for the needed data. The direct engagement with participants provides the researcher with rich data exclusively gathered directly from them, as well as experiences, observations and dynamics in their work setting.

Notably, Choemprayong and Wildemuth (2009:52–55) caution against the limitation of a case study, commenting that research findings cannot be generalised. The findings are relevant to a particular circumstance or unique selected case location, at which the study was conducted. Compared with other methods, such as a survey, which seeks to provide a representative sample of a larger population, can be generalised beyond the study location; the results from case studies cannot be generalised to the entire population. The challenge experienced by the researcher was the large volume of data generated and collected during the seven focus group discussions and the interview with the key informant. This required a knowledge of analysis, for a large volume of data collected needs to be managed and analysed, which proved to be an enormous task. Data that could not be accommodated in the dissertation has been safely recorded and stored, and will be used in future publishing.

### 3.4. Population of the study

According to Babbie (2007:111), the population of a study refers to ‘that group about whom we want to draw a conclusion’. Ngulube (2005:129) defines the population of a study as a ‘set of objects whether living or non-living which are the focus of the research and about which the researcher wants to determine some characteristics.’

The population of this study was drawn from a total number of 520 of ECD centres in Ekurhuleni, registered with the Gauteng Department of Education and offering Grade R classes drawn from the EMIS database.

Table.3.1: Target Population of registered Grade R centres.

<b>Facility Type</b>	<b>Gauteng North</b>	<b>Gauteng South</b>	<b>Gauteng East</b>	<b>Total Population</b>
Home-based	11	148	67	<b>266</b>
Public Schools	33	67	97	<b>197</b>
Private/Independent	21	15	21	<b>57</b>
<b>Total per region</b>	<b>65</b>	<b>230</b>	<b>185</b>	<b>520</b>

Apart from examining participants in their work dynamics, settings and contexts for the purpose of this study, it was also important to understand variables such as demographic and socio-economic factors such as gender, race and location relating to ECD practitioners. Endorsing the point made by Case (2012:326) that information needs differ according to demographic and social background. In South Africa, the inequality gap is still rooted along race, gender and socio-economic lines. Figure 3.1 below, is an area map of the study showing some details of characteristics and context of the geographic location of townships, towns and suburbs, school wealth and where participating ECD centres are located. In South Africa, schools are classified according to school wealth using the quintile system, and this often depends on the community the school is located. Quintile 1 schools receive a 100% subsidy from the government. The majority of them is found in the townships or historically disadvantaged communities and is non-fee-paying schools. While quintiles 5 are historically advantaged Model C schools found in the affluent towns and suburbs. Although they receive some form of subsidy from government, they are able to generate their own revenue or income by levying additional fees on parents. Private and independent schools are largely dependent on their own income from their middleclass parents; very few receive subsidy from the government. Community and home-based centres receive a nutritional support subsidy from the Department of Health and Social Development. The registered and accredited Grade R ECD centres also receive a subsidy to cover the salary for Grade R practitioners from the Gauteng Department of Education.

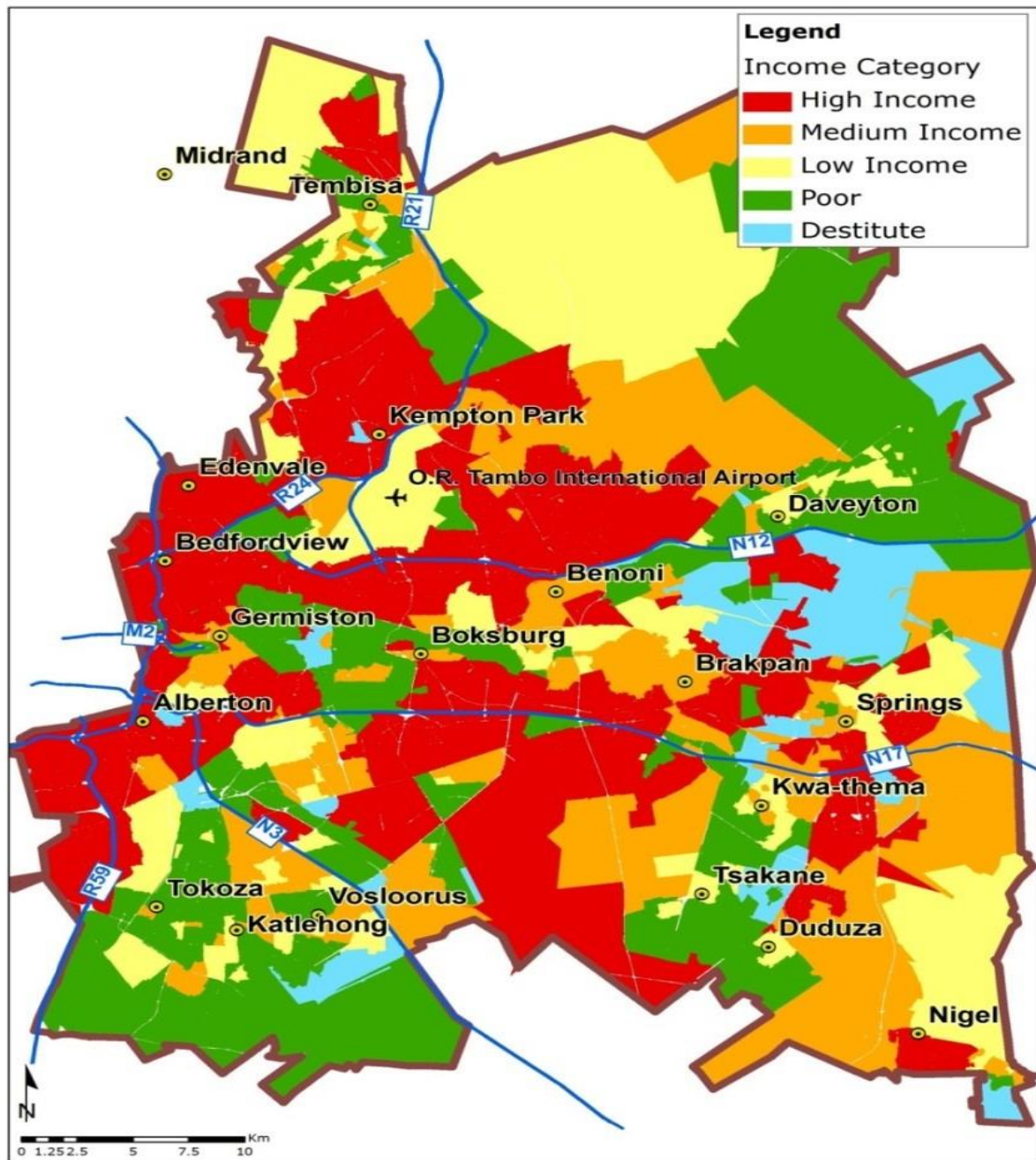


Figure 3.1: Area map of the study, showing the geographic location of townships, towns and suburbs, school wealth and where participants are located. Source: Ekurhuleni Metropolitan Municipality, 2014/15. Integrated Development Plan (IDP).

Figure: 3.2 below illustrates the total EMM population composition according to the race groups, the largest and most represented race group is African blacks (79%), followed by Whites (16%), Coloureds (3%) and Indians (2%).

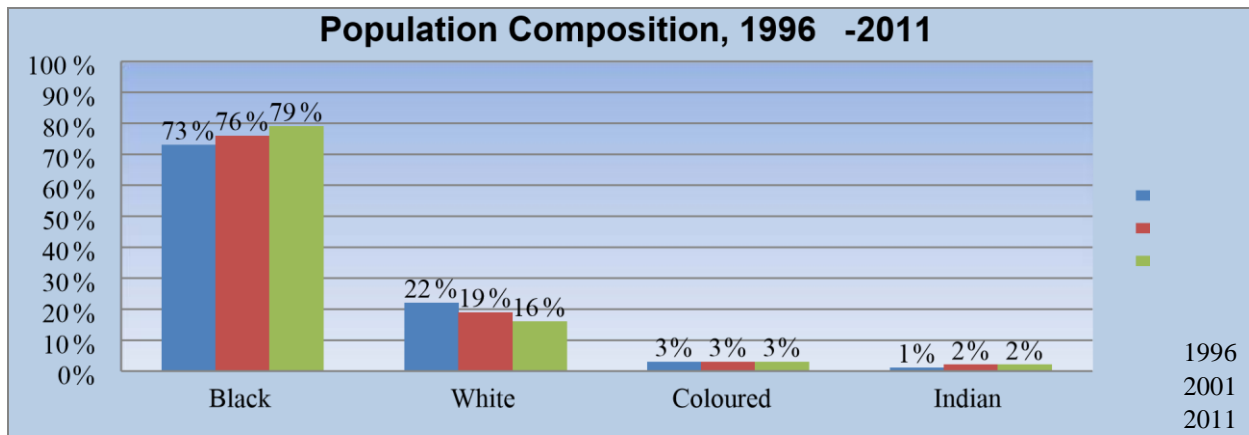


Figure 3.2: EMM population composition, 1996-2011. Source: Statistics SA (2011)

### 3.5. Sampling

Fox and Bayat (2013:54) argue that it will not be possible and practical to involve everyone when conducting a study of this nature aimed at discovering details of participants' information needs and information-seeking behaviour. There are two sampling techniques that are classified as general categories: (1) probability sampling and (2) non-probability sampling (Wildemuth & Cao, 2009:129–130). The difference between the two sampling procedures is that the former can eliminate a researcher's bias because it provides an opportunity for any member of the population with an equal chance to be included in the study; it also allows the results to be generalised. The latter technique uses the researcher's existing knowledge about the informants and does not allow the results to be generalised (Ngulube, 2005:132). As a result, a non-probability sampling technique, using a combination of both purposive and stratified technique were employed in this study (Wildemuth & Cao, 2009:129–130).

Babbie (2007:201–201) and Ngulube (2005:130) comment, further, that a decision to determine a sample size in qualitative research is the prerogative of the researcher. In other words, there are no rules; it depends on what the researcher intends to do with the findings. In addition, Fox and Bayat (2013:61) recommend that researchers must describe the logic and sampling procedure they have followed to determine the sample size for the study. Hill and Williams

(2012:74) point out that the researcher must consider principles to determine the number of participants needed to decide the size of a sample in order to obtain consistency in results. The guiding principles adopted by this study to determine the sample size for this investigation were informed by the following:

(a) The accessibility of the various ECD centres and schools and the demography and diversity of ECD centres in Ekurhuleni; (b) the logistical and time constraints, (c) In addition, considering that the scope of the study is limited in nature also played a very important role to guide the researcher decision to select sample for this study (Babbie, 2007:184).

From the target population of 520 schools and ECD's, a target sample of 50 Grade R practitioners were chosen and deemed as reasonable to achieve the study objectives. The researcher purposefully selected Grade R practitioners and stratified them according to facility types taking into consideration the factors such as the demographic profile and socioeconomic status of each school and ECD centre. Table 3.2 below provides target sample according to facility type.

Table 3.2: Target Sample according to facility type

<b>Facility Type (strata)</b>	<b>Target sample</b>
Community/Home-based ECD centre	25 practitioners
Public School ECD centre	20 practitioners
Private/independent school	5 practitioners
<b>Total</b>	<b>50 ECD practitioners</b>

### 3.6. Data collection

This study obtained its primary data through an interview with the key informant, and through focus group discussions with the participants. These took place in various settings ranging from libraries, community centres and in actual Grade R classrooms. The data collection followed a predesigned schedule of semi-structured questions to guide the focus group discussions (see Appendix B) and an interview with the key informant (see Appendix C) to allow participants to have a conversation, talk openly to express their feelings, perceptions, behaviour and respond to the questions using their own words, opinions and experiences. Maxwell's (2013:87) definitions of data in a qualitative study includes 'anything the researcher sees and hear during study' During September to November 2016, an interview with the key informant took place

and discussions with seven focus groups consisting of 49 participants, were conducted. No further information will be given about the key informant in order not to compromise that person's anonymity. All the participants agree to participate and to have their oral contributions recorded. This they did by completing and signing the consent form (see Appendix A) prior to the interview and the focus-group session. Each group consisted of a minimum of 2 to 13 members and, interviews lasted between 45 minutes to 2 hours per session. The researcher facilitated the sessions and voice recorded the discussions. Audio recordings and notes taken were transcribed into electronic format to protect raw data, and records of proceedings were kept for the purpose of analysis.

The execution and management of data collection was very cumbersome, as a list obtained from the Gauteng Department of Education did not provide the email addresses of schools and centres. The researcher purposefully identified selected schools and a created backup list, anticipating a situation in which there would be no responses. Secondly, he called the individual schools to verify the address and requested an email address to send the formal invitation to the school principals (see Appendix G). In some instances, the researcher had to meet with the school principal at the school to explain the purpose of the study, thereby facilitating a quick and positive response. Table 3.3, below, provides a programme outlining dates, place and the number of participants who took part in the focus group discussion.

Table.3.3: Data gathering schedule

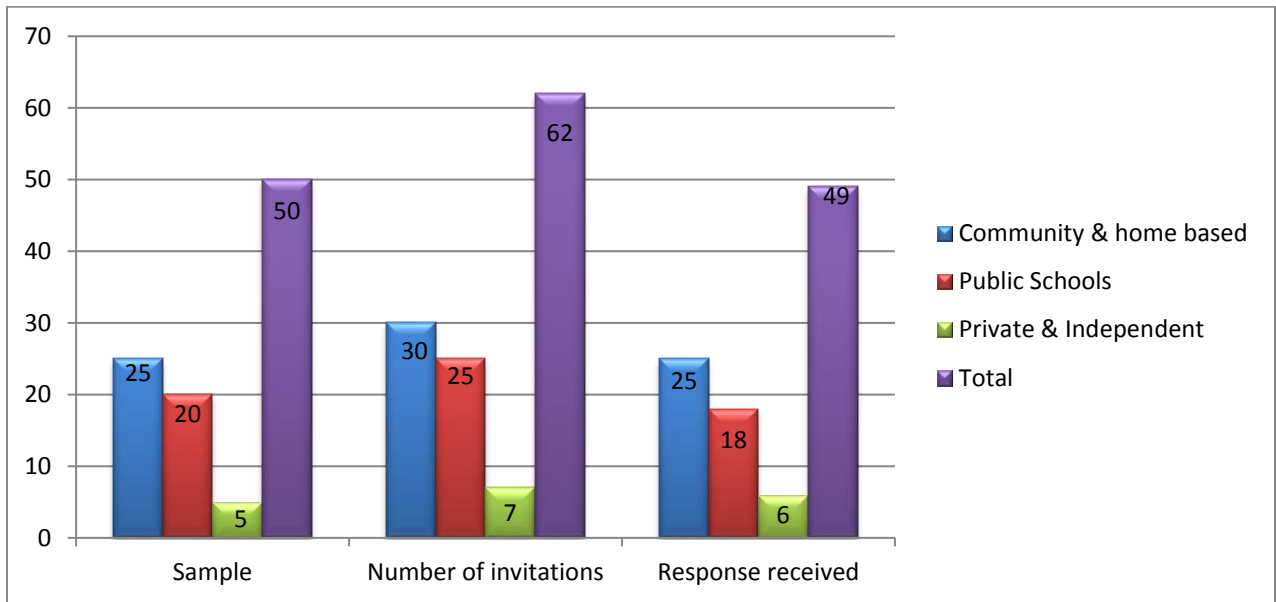
<b>DATE</b>	<b>PLACE</b>	<b>FOCUS GROUP NUMBER</b>	<b>FACILITYTYPE/ORGANISATION</b>	<b>GENDER</b>	<b>RACE</b>
21/09/2016	Tokoza Youth Centre, Tokoza/Katlehong	<b>PS 1</b>	Public Schools	<b>Females</b>	11 African Black
22/09/2016	Reiger Park Community Library, Germiston	<b>PS 2</b>	Public Schools	<b>Females</b>	4 Coloured and 1 Indian,
28/09/2016	Bredell, Kempton Park	<b>PS 3</b>	Public Schools	<b>Females</b>	2 White
28/09/2016	Springs/Nigel	<b>PI 1</b>	Independent/private Schools	<b>Females</b>	3 White
05/10/2016	Winnie Mandela Community Library, Thembisa	<b>CHB 1</b>	Community/Home-based Centres	<b>Females</b>	11 African Black
10/10/2016	Vosloorus/Tsakane	<b>CHB 2</b>	Community/Home-based Centres	<b>Females</b>	14 African Black
17/10/2016	Brakpan Public Library	<b>PI 2</b>	Independent/private schools	<b>Females</b>	3 White
11/11/2016	Alberton Civic Centre	<b>Key Informant</b>	EMM Department of Health and Social Development	<b>Female</b>	1 African Black

### 3.6.1 Response rate

The total population sample of 50 participants and one key informant was planned to collect data for the study. However, 62 invitations were sent out to accommodate non-responses. Therefore, the overall response level based on the seven focus groups session was 49 participants out of a sample of 50, comprising 18 out of 20 participants from public schools, 6 of 5 from private and independent schools and 25 out of 25 from community and home-based centres. There is only one executive manager responsible for ECD at Ekurhuleni.

The response rate from the public schools was lower than the original projected sample due to the following reasons: there were some participants who confirmed but never turned up for the focus group discussions (some citing an emergency school meeting or visitors from the Department of Education district offices) while others never send an apology. This necessitated the researcher to organise another session for this category to ensure that the level of response was adequate and representative. Meanwhile, there was overwhelming response rate from both the community and home-based centres, as well as private and independent schools. Community and home-based centres used their local forum leaders to communicate and disseminate information. Although invitations were sent to a selected number of schools, some practitioners voluntarily attended the focus group, thereby making up for the ones who confirmed but never turned up. The figure 3.3, below, analyses the sample size and response level of participants, excluding the key informant.

Figure 3.3: Presentation of the response rate of participants



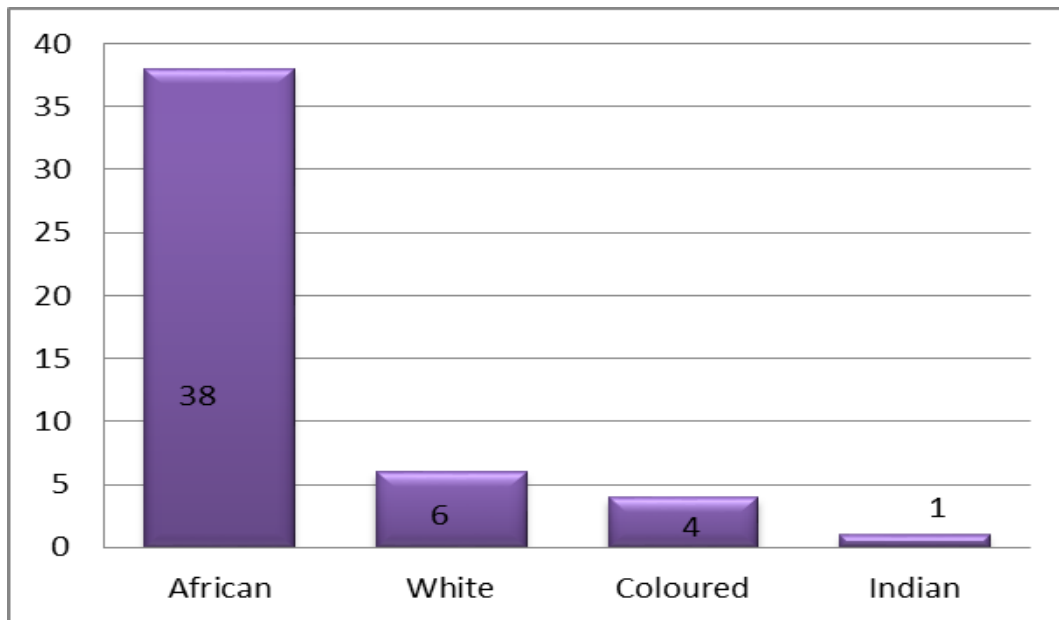
### 3.6.2 Profile of participants

According to Case (2012:326,355), an analysis of participants' demographic profiles and their geographic location tends to be a common factor and is regarded as useful for interpreting data in studies that involve groups, but should not be a focus if they do not have relevance to the study. Therefore, it must be noted that the following observable variables, such as demographic and geographic, socio-economic background and institutional or work tasks setting, played a very important role in the selection of participants for this study. This is so primarily to ensure that the sample is representative of the views of all race groups in Ekurhuleni and from both affluent urban suburbs as well as townships. The environment in which one operates has a bearing on t information-seeking behaviour because of boundaries that may be created. Hence, profiling of participants is still a key phenomenon considering the history of South Africa of which is helpful to give a better picture and holistic view pertaining to education inequalities.

### 3.6.3 Demographic profile of participants

Figure 3.4, below, shows the participants racial and gender profile. In terms of gender, all participants were female practitioners and the majority were Black (38 out of 49) (77%), followed by Whites (6 out of 49) (12%), then Coloureds (4 out of 49) (8%) and, lastly, Indians (1 out of 49) (2%). This trend is consistent with the official population census statistics of 2011 found in Figure: 3.2, above (EMM population composition, 1996-2011).

Figure 3.4: Participants' racial profile [N=49].



### 3.7. Data analysis

Hsieh and Shannon (2005:1278) define qualitative data analysis as ‘a research method for the subjective interpretation of the content of text data through a systematic classification process of coding and identifying themes or patterns’. Data analysis and interpretation primarily embraces the management of raw data ‘to bring order, meanings and structure such as development of thematic areas on the massive volume of information the researcher obtained during the process of data collection’ (Marshall and Rossman, 2016:214). It needs to be borne in mind that a qualitative study is subjective. It is thus important for the researcher to demonstrate how the study arrived at the findings by describing the method and procedure followed, such as how the collected data was

stored, summarised, grouped, displayed, analysed and interpreted. When going through the data sets recordings and transcripts, the researcher had constantly to bear in mind the research questions that the study seeks to address. This strategy helped to sieve through the data sets with specific reference to the research questions.

All collected audio-recorded data and notes during the face-to-face interview with the key informant and focus group discussions were transcribed using Microsoft Word as the primary data source. Due to the complex nature of the data and limitations in time and training, the researcher used the basic functions of NVivo<sup>7</sup> computer software primarily to store data and organise and label codes. Data collected for this study were manually analysed using qualitative content analysis as a strategy to describe and interpret the presented data. The researcher applied the basic focus group data analysis techniques using the principles of content analysis as a framework, guided by the research schedule and the interview questions to understand information behaviour of Grade R practitioners. Furthermore, the researcher chose to use the focus group rather than individuals as a unit of analysis. Thereafter, the researcher analysed the qualitative data in order to identify significant patterns, similarities of words, the number of words, and with what frequency they were used by the participants. It must be noted that the researcher used the participants' voices to illustrate and emphasis a specific point to support the researcher's interpretation and presented conclusions. Thereafter, assigned codes or pseudonyms were used when there were direct quotations from participants' voices and no names were mentioned to maintain confidentiality and anonymity. Table 6, below, shows the pseudonyms' codebook, linking codes generated with the focus group and the facility type used in the chapter four, where there are direct quotations from participants' voices.

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<sup>7</sup> NVIVO is computer software used to analysis qualitative data. Initially the researcher relied on Microsoft word to store, organise and arrange data. Through self-study on how to use the software, was able to use NVIVO to store and organise data to facilitate the sorting and categorisation of data from the transcript. However, the software does not have the capabilities to generate codes and themes, these were created manually

Table 3.4: Codebook linking codes generated with the focus group and facility type

<b>Facility types</b>	<b>First level codes</b>	<b>Second level codes (Focus group number)</b>
Community and Home Based centre	<b>CHB</b>	<b>CHB1</b> <b>CHB2</b>
Public School	<b>PS</b>	<b>PS1</b> <b>PS2</b> <b>PS3</b>
Private and Independent	<b>Pi</b>	<b>Pi1</b> <b>Pi2</b>
Key Informant	<b>KIF</b>	-

The generated themes and coding categories adopted expressed ideas and concepts that are significant to the research schedule and are also aligned to the theoretical framework that framed this study. Furthermore, Microsoft Excel was used to display graphs and Microsoft Word to display both number tables and text tables. In qualitative content analysis, there is less emphasis on the statistical significance, although a great deal of counting takes place behind the scenes. In other words, the noting of recurring patterns or themes is based on counting how many times similar words, concepts or phrases are mentioned by participants, hence the emphasis on the interpretation of meanings derived from data. Therefore, one can justify the use of graphs and charts (including matrices for data display) as long as the researcher remembers that they are used for a different purpose in qualitative research, unlike in quantitative research (Marshall & Rossman, 2016:228). All the graphs/figures used to describe the profile of the population and participants' response rate were interpreted. In addition, tables used to analyse participants' responses and to note recurring patterns, themes and groupings of similar characteristics or contradictions were interpreted.

### 3.8. Pilot study

Davis and Mosdell (2006:96) stress the benefits of conducting a pilot study as being to 'determine the effectiveness of the research instruments with few selected representative members of the sampled population'. According to Fox and Bayat (2013:102), pre- testing allows the researcher to mitigate any shortcomings in the research instruments that, if not properly identified in advance,

may affect the integrity of the research conclusion and findings, despite the fact that the research instrument being approved by the UCT Library and Information Studies Centre Ethics Committee. To test its relevance, it was necessary for the researcher to conduct a pilot study on a group made up of five Grade R practitioners, whom were excluded from the main study. The pilot study was conducted to test the interview schedule, also to give the researcher an opportunity to experience what to expect in the main study. The pilot study found the questions to be relevant, simple and understood by participants. The only adjustment necessary was to accommodate the face-to-face interview with the key informant.

### 3.9. Ethical considerations

This study involved human beings as participants, and it is an acceptable practice in the social science discipline that the researcher must seek ethical clearance from the relevant institutions where the study will be conducted. Ethical clearance was granted from the UCT Library and Information Studies Centre Ethics Committee prior to commencement of the study (see Appendix D). Additional requests for ethical clearance were approved by the following institutions: the Gauteng Department of Education Research Committee for the selected sampled public schools (see Appendix E), the Ekurhuleni Gauteng Department of Health and Social Development for the individual home-based ECD centres (see Appendix F). The Independent Schools Association of Southern Africa (ISASA) was approached, but this directed the researcher to approach individual private and independent schools directly since affiliation to ISASA is voluntary and each school has the prerogative to participate in the study. In addition, to the clearance received from the respective research committees' letters of requests were send to all school principals before engaging with the participants (see Appendix G).

Mouton (2012:239) and Babbie (2007:62) recommend that the following ethical considerations are a norm, equally important for social sciences research undertaking when dealing with human beings: 'trust, and protect participant's rights, informed consent, anonymity and confidentiality.' Before conducting the focus groups discussion, the researcher explained the purpose of the study and all participants signed informed consent forms (see Appendix A).

### 3.10. Data validity

Marshall and Rossman (2016:228), speak of theoretical sufficiency to demonstrate how the researcher can establish the usefulness and trustworthiness of the data quality and build credibility of the study. For this reason, the quality of data is an important aspect of this study. The qualitative data collected was validated through data triangulation to corroborate multiple perspectives from participants. It was evident when more than one participant repeated the same responses when answering the same questions across the seven focus groups discussion, including the interview with the key informant. In addition, some key observations were noted and interpreted during the focus-group discussions across all three ECD facility types. At the end, participants presented some degree of consistency in the responses and as well as unique perspectives about their experiences that provided answers to the research questions.

### 3.11. Conclusion

This chapter discussed the research approach and design; methods and paradigms; the overall plan of the study and; the approach used in this investigation. The study follows a qualitative research method using a case-study research design. The chapter explained the principles, procedures and criteria used to select the population sample. The chapter described qualitative content analysis procedures as well the importance of conducting a pilot study, data quality, and ethical considerations and moral obligations to the participants.

## CHAPTER 4

### DATA ANALYSIS AND INTERPRETATION

#### 4.1. Introduction

In the previous chapter the research methodology and its associated processes and procedures related to methods used to obtain and manage data for the study were outlined. This chapter presents data according to the research instruments that consisted of nine questions (see Appendix B) derived from the research questions.

#### 4.2. Presentation of data

The data is presented according to the research schedule following the number of questions 4.2.1 to 4.2.9 that were used by the researcher during the focus group discussions. As indicated, the researcher tweaked the same questions to conduct a face-to-face interview with the key informant.

##### 4.2.1. Please tell me about your profession as an ECD practitioner

This question was an icebreaker to assist the researcher to settle the participants. As a result, they felt comfortable and were able to participate freely because it appeared that someone recognises their work. In addition, the question was meant to understand the context within which Grade R practitioners operate. Moreover, it helped to clarify some of the public perceptions on ECD practitioners. The question was deemed significant, given that the theoretical framework puts emphasis on professional background and its influence on information seeking and use. The participants' responses were based on their own observations, perceptions and experiences and how the society in general perceives their profession. Most parents hold ECD work in low esteem; some even believing that ECD practitioners are paid to do everything for their children because they are just nannies. This point of the research instrument helped the Grade R practitioners to unearth great deal of their feelings. They emphasised several points such as — first and foremost — not everybody can work with children. Secondly, one must be qualified to be a Grade R practitioner. Thirdly, Grade R practitioners' profession involves child development in its entirety; it facilitates learning through structured play with emphasis on developing both large and small

muscles, ensuring that children learn and are ready for school. They did however, acknowledge that some of them are not qualified and trained.

*Participant from Group CHB 2: We engage kids in activities using a daily programme to improve their small and big muscles, such as how to cut paper, hold a pencil and big muscles by playing outside and interpersonal skills learning the process of the school which is necessary for them to be school ready. Because if children did not develop their small and large muscles they are going to struggle when they go to Grade 1, he or she can't hold a pen, he will be weak and the teacher will automatically label him or her a slow learner.*

The key informant also made the point that ECD as a profession is associated with the education profession. Ideally, an ECD practitioner must register with the South African Council for Educators (SACE). However, not all ECD practitioners went through a compulsory training to get formal qualifications, and most ECD practitioners are mature elderly women, in the main with only indigenous knowledge of child development.

*KIF: One can start an ECD centre even if she does not have qualifications. Basically' it entails taking care of children. We are trying to say it must come to a point where it is compulsory for them, before one can start an ECD centre, to go through the minimum National Qualifications Framework <sup>8</sup>(NQF) level 4, and register with South African Council for Educators (SACE). So that we assured that whatever programmes are delivered on site is according to the qualifications that one would have acquired. The entry-level qualification is level 4 and 5 then they can proceed to a Diploma. The highest qualifications would be your BEd degree and Post graduate degrees specialising in ECD.*

From the participants, it transpired that there is a general public perception that one can easily start an ECD centre, even if one does not have qualifications, simply because it entails taking care of children. From the participants' responses one realised that there is a general lack of understanding of the Grade R practitioner as professionals by the various stakeholder's who are critical to provide

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<sup>8</sup> The South African National Qualifications Framework provides a national qualifications guideline and standard based on learner's competency, skills and knowledge.

the necessary support and help to achieve their primary tasks of quality teaching and learning. Focus group discussions revealed that ECD practitioners can be categorised as para-professionals and professionals. The para-professionals are those who went through the minimum of some National Qualifications Framework (NQF) Level minimum accreditations. While the professionals are those who acquired a 3-year formal diploma and or a 4-year university degree specialising in early childhood development plus a post graduate degree. Across the three facility types ECD centres, public schools and private schools, participants highlighted the significance of qualifications linked to their profession and bragged about their qualifications that ranged from diplomas to post-graduate B.Ed degrees specialising in ECD. A few extracts represent some of the general statements and point of view from the participants to support the above interpretation.

Participant from Group PS 1: *I am glad you asked that question because people, even our colleagues at schools, don't understand our profession as ECD practitioners. Firstly, I am a qualified practitioner with BEd degree specialising in Early Childhood Development.*

Participant from Group CHB 2: *I am a full time principal and ECD practitioner teaching Grade R. I have a four-year degree in ECD education and I am currently a postgraduate student at the University of Johannesburg.*

Participant from Group Pi 2: *Not a lot of people can work with kids, you must be qualified to be a Grade R practitioner, or work towards being qualified, I have a four-year diploma.*

#### 4.2.2. Which work roles do you have as an ECD practitioner at your centre?

To this question, the participants indicated that they indirectly fulfil other roles as Grade R practitioners, even when they perform them unconsciously, without paying much attention to link them to their tasks and list of duties. A total of 10 work roles were picked from all focus group discussions, as well as from the key informant. These work roles include the Parenting, role because automatically when children enter the school premises they are in the care of these practitioners. As to the Manager's role, the majority of Grade R practitioners from community based ECD centres pointed out that they are owners and principals in addition to their roles as a teacher, as they also run ECD centres as a business. Grade R practitioners in some

Private/independent schools assumed the formal Head of Department role as managers within the school governance structure.

Participant from Group Pi 1: *I assist parents with parental skills, how better to parent their children most parents are very busy.*

Participant from Group Pi 1: *In addition to my teaching role as Grade R practitioner, I am the acting HOD for the entire pre-primary grades (grade 000-grade R) in the college and I am part of the college management team*

The social worker role requires them to be able to see the behaviour of the child in terms of emotions, vulnerability to if s/he is abused and take the necessary intervention. Moreover, social workers themselves consult them for information when dealing with cases relating to Grade R children.

Participant from Group PS 1: *Because we are the ones who first notice if the child has a problem even though we are not allowed to diagnose the child. Also, social workers themselves consult us for information when dealing with cases relating to Grade R children from our schools.*

Administrator role; there is a lot of administration work involving, admission of children, report writing, financial reports and managing stocks and supplies. The role as a nutritionist requires that they teach children about healthy eating habits, give nutritional tips and advice to parents to meet the nutritional needs for their children. Another nutritional aspect highlighted by participants is that some kids are allergic to certain foods, some kids are Muslim or Hindu and, therefore, have special dietary requirements. Being sensitive to different religions dietary requirement is very important.

Participant from Group Pi 1: *There is a lot of administration work involved, admission of children, report writing, finance report.*

Participant from Group Pi 2: *We provide three balanced meals, but in the morning you just see a child walking in with a doughnut, a packet of chips. We teach our children healthy eating habits, we encourage parents to pack for the afternoon snack a fruit, yoghurt*

The counsellor's role: Participants responded that they provide counselling to parents and advice to parents regarding learners learning problems. The evidence is presented in the following quotations from respondents:

Participant from Group Pi 2: *You give counselling to parents and kids. These days children have more problems, 1 out of 3 children from your class come from a divorce family, sexually abused, verbally abused, or physically abused.*

First aider role: Most Grade R practitioners have basic first aid training. These roles overlap to other grades in the school, since most Grade R practitioners in public schools are part of formal school system.

Caregivers: ECD centres are a full- day care facility because most parents are working in the township ECD centre provides day care for children as well as aftercare.

Information providers: participants mentioned that they write newsletters and information briefs, act as editor for in-house information booklet, hold parents' information evenings, hosts and speak at various community events.

Participant from Group PS 1: *Most Grade R practitioners have basic first aid training. These role overlaps to other grades in the school, since most Grade R practitioners in public schools are part of formal schools' system. When there are crises in the other grades we offer our services.*

Participant from Group Pi 2: *ECD centres are a full day care facility, the first child is dropped at 6h30 and the last child the school at 17h00.*

Participant from Group CHB 1: *We prepare pamphlets to market and advertise our centres.*

Service provider role: The majority of respondents in particular community-based ECD centre and private schools said that as a service provider you had to keep high quality standards to maintain good reputation. The key informant corroborated these roles during the face-to-face interview.

Participant from Group Pi 1: *You have to keep the name of the school high because we are a very known preschool in our area, a lot of advertising is a word of mouth.*

#### 4.2.3. Which responsibilities do you have at your ECD centre?

Closely related to Grade R practitioners' roles are their responsibilities for, despite their professional background, individual work responsibilities influence their information-seeking behaviour. The responses to this question revealed that all participants seem to agree that they assumed a number of other responsibilities in addition to their roles as Grade R practitioners. According to the literature review, this influenced their information-seeking behaviour. These responsibilities include serving on various committees, such as being a member of the School Governing Body (SGB), safety and security committee, union committee and participating in extra-mural activities as coaches for various sporting codes or helping senior grades. Participants also indicated that they are responsible for security and safety and maintenance inside and outside to make sure that the play area and the general area surrounding it is free from any dangerous objects and safe for the children to play; and to make sure that gates are locked.

Participant from Group Pi 1: *Safety you have to make sure that the outside playground equipment is in good working condition continuously, within the classroom there is nothing or chocking and dangerous to the children.*

Health-related responsibilities entailed developing policies and procedures on how to handle children when they experience any problems, to protect the centre, children and their parents and administer and keep records of children's medicine with the parents' consent. One of the health core competencies is to ensure that all Grade R practitioners renew the first aid course certificate annually. In addition to these responsibilities that influence information-seeking practices, practitioners need to be continuously alert and listen to the news, in the event of an outbreak of

any communicable diseases, such as measles, take precautions and inform and educate parents to look out for these symptoms in their children.

Participant from Group Pi 2: *Health-wise, we continuously check the kids if we see a little spot that looks like a blister first thing you think it is chickenpox because that first that comes to mind. We continuously listen to the news, if there is an outbreak of measles, know what's happening and take precautions and inform and educate parents, unfortunately if the child displays these symptoms you can't allow them to the school.*

In addition to the above, some participants emphasised cleaning and storeroom safekeeping as a very important component of their responsibilities. Participants further emphasised that they keep the roster for all cleaning responsibilities, hygiene is very important right through, from the kitchen to the toilets. The researcher observed that some classrooms in the private schools have their own storerooms while, due to limited resources, both public schools and community based centres have centralised their storerooms. It is the Grade R practitioners' responsibility to ensure that the storeroom is tidy and neat; toys are maintained and to make sure that they are cleaned after use to avoid the spreading of germs amongst children. The following extracts represent some of the general statements from the participants to support the above interpretation.

Participant from Group Pi 1: *Each class has its own storeroom and it is my responsibility to ensure that the storeroom is tidy and neat, toys are maintained and make sure that they are cleaned after use to avoid spreading of germs amongst children. And lastly I oversee that the ground staff, for example, ensure that sand pits are properly maintained and safe for kids to play in.*

Other additional responsibilities mentioned by one participant related to spiritual responsibility, being at the Catholic School, the Grade R practitioner had spiritual responsibility to teach catechism two days a week to prepare the children in the senior phase for their first Holy Communion. The key informant emphasised that briefly they need to protect children, and to identify children who are vulnerable so that they can get immediate services, the key responsibility is being protectors of children.

#### 4.2.4. Which tasks do you have that emanate from your work roles and responsibilities?

The response to this question from all participants was that teaching through play and organising resources are the main tasks of Grade R practitioners. They devote most of their time doing the planning, assessments, record keeping, completing learners' report cards, keeping an up-to-date observation book to record the children's progress, identify learning barriers that children experience and ensure that they overcome them. Other tasks are related to the preparation of children cognitively, emotionally, morally, physically and socially for school readiness. For example, they must be mature enough to solve basic life skills problems, learn to cope with life challenges and manage basic problems in the absence of their parents and know simple body functions. Report writing is quite an extensive task because they need to cover all the developmental milestones of each child per term. The following statements provide some evidence of the narrative presented above:

*Participant from Group PS 1: Involves a lot of records keeping and confidentiality, especially if you observe certain behaviour from the child. There is a lot of child abuse, and social workers rely on our records for child abuse reported cases as evidence in court.*

In addition, participants indicated that storytelling is very important aspect of their teaching task and it is done according to themes. Grade R children learn by seeing, observing pictures, touching and listening, basically involving all five senses. Storytelling aims to develop skills such as visualisation, visual memory, mind mapping, listening and auditory processing because it is important for children need to listen and process information at the same time. Most classrooms have carpets and these are used for storytelling. Some participants from public schools, however, indicated that due to overcrowding in their classrooms it is not practical to accommodate the space for a carpet in the classroom. The task of report writing requires that practitioners must develop some level of communication skills in order to be able to communicate effectively with parents and various stakeholders. The significance of communication was also highlighted by the key informant as a key task because practitioners have to interact with parents and that is very important because they need to give feedback to parents on a daily basis in terms of the performance of their children. In other words, the importance of communication will help practitioners to establish good relations with parents and better manage conflicts.

Participant from Group Pi 1: *Storytelling is a very important aspect of ECD. All our classes have carpets and we use the carpets for storytelling. It is a modern form of oral traditional from our ancestors and we cannot let it die. With storytelling, we develop the following skills, Visual memory, reading lovely picture books and auditory processing children need to listen and process information.*

KIF: *One of the task[s] they have is to interact with parents and that is very important because they need to give feedback to parents on a daily basis in terms of performance of their children.*

As to the cleaning task, almost all participants highlighted the significance of maintaining a clean environment and all the teachers showed commitment to keep their classrooms clean. The emphasis was on the cleaning of toys as a very important task because children can easily pickup germs. One participant mentioned the fact that she personally put on her hand gloves to clean the toilets because she is afraid that children will get infected.

Participant from Group PS 2: *Cleaning is not an easy task all the teachers try to keep their classrooms clean; you teach the kids good hygiene. Always accidents happen sometimes kids come to school with running tummies or vomits in class and you quickly ask the teacher next door to look after the children so that you can clean the classroom and disinfect it.*

4.2.5 What kind of information do you need to perform your work roles, take care of your responsibilities and achieve the tasks that you have at the ECD centre?

The first response recorded for this question from one group was,

Participants from Group PS 1: *We don't need information there is too much information at our disposal, because Grade R curriculum follows a planned programmes or lessen plan from the department of Education.*

It was subsequently proven that the above was an individual opinion. not a reflection of the group opinion. The majority of participants' responses revealed that a Grade R practitioner indeed needs

a variety of information to perform their roles and to take care of their responsibilities to achieve their tasks. They work in an information-rich environment that requires a constant and up-to-date variety of information on a daily basis. The following statements substantiate the responses articulated by the participants

Participants from Group PS 1: *Yes, a lesson plan is a guide it is allowed for one to get additional information to enhance the theme on the lesson plan for example getting new ideas and planning classroom activities.*

Participants from Group PS 2: *I just feel that we as practitioners we need to go an extra mile. Don't just focus only on the curriculum only from the department of education we need to add stuff that you will embrace this child and help them during their schooling career.*

They need basic information about childhood development and preparation for the learning environment because they plan their lessons through various themes that are implemented seasonally according to their programme. For example, they need to explain the responsibilities of a police officer, social worker and the courts. They need to prepare the learning environment to cover developmental stages of each child. This entails, for example, if you are teaching Grade R you need to prepare the learning areas in order to encourage motor development, social skills and psychological development and a knowledge of toy utilisation, communication, for they communicate variety of stakeholders. As indicated during the interview with the key informant, one of the information request that came in during the ECD focus week was the information need on how to cope with difficult parents. All participants expressed and stressed the importance of information needs related to children discipline. The argument from all the participants is that the current education policy does not allow children to be disciplined and equally there is no support mechanism to empower teachers to discipline children. Practitioners expressed information needs that emerged across all three -facility types cited by most participants, categorised and summarised as follows:

- (a) Practitioners personal and professional development, own personal study and development, information on conflict resolution and how to cope with difficult parents and how to convey

messages and speak to parents. Information was also needed to help access and to apply for sponsorships, for example, addresses and contacts for sponsorships

Participants from Group CHB 1: *I mean as community-home based centres we don't make a lot of money with 30 kids, you must pay teachers' salaries and buy foods.*

- (b) Legislation and policies related to governance of the ECD centres. In particular, information related to law such as consumer act, new education, etc. is important for ECD practitioners. Moreover, information related to policies regarding Grade 1 admission requirements as well as communication that informs parents is crucial.
- (c) Curriculum and classroom support, guidelines and circulars with regards to the implementation of CAPS for Grade R. Big picture books to be used during storytelling, 3D books, Audiobooks, utilisation educational toys, health alert information to be about immunisation campaigns to protect the health of the children to be disseminated and workshops: through workshops practitioners can be informed about the latest developments around child development and other related aspects of children, a directory of professionals in the area for referral purpose, and children discipline.

4.2.6 Which information sources do you prefer and often use to get the information that you need for your work roles, responsibilities and tasks?

As indicated in the literature review, Information-seeking behaviour is triggered when one initiates a process to look for information purposively or incidentally, thus it can be used to consult a formal or informal source in accordance with a perceived relevance to a need. To accomplish classroom activities and learning areas described in the lesson plan, the practitioners' use of information sources is aimed at broadening the scope of teaching and learning programmes that entails numeracy, communication, physical development and social skills. Across all facility types, participants indicated that they prefer and often used various kind of information sources, with the most common and popular being the internet and the personal networks they have — in fact, most of the times they prefer person-to-person interaction. Big picture books, magazines and

newspapers, were also mentioned as very important and a preferred format. Most of the practitioners mentioned that they are on social media and are using smartphones. They would prefer to take advantage and make use of the new technology to access information through other formats, such as email. They listen to the radio occasionally because half of the time they are very busy, especially during the week, unless some of the programmes are scheduled in the afternoon. Again, face-to-face contact is very important, especially through workshops, meetings and forums’ however it is not possible for all to attend, so their attendance is always rotated

Table 4.1: Summary of formal and informal information sources used by participants

<b>Formal sources</b>	<b>Informal sources</b>
Internet (Google and Pinterest)	Relied more on other professionals such as a police officer, nurse, doctor, social worker, occupational therapist.
Newspapers or newsletter, in particular <i>Nali’bali Newsletter</i> <sup>9</sup>	Colleagues and friends, ‘networking with colleagues from other schools is the most successful way of getting new ideas because some senior colleagues have experience’.
Policy and legislation documents	Meetings.
Lesson plans	Local forums using social media to communicate and share information.
Old magazines	Incidentally listens to radio talk shows interesting to children and related topics. Scheduled educational programmes on TV
Resource books to use in the classroom	
TV	

#### 4.2.7 Which strategies do you often use to search for and access information?

The ability to search and access different information sources to satisfy information needs depends on the individual information-seeking skills when conducting the search. Therefore, the study determined how effective practitioners in their approaches to search for information. Practitioners described the following approaches as the most common actions initiated to search and retrieve

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<sup>9</sup> The *Nali’bali Newsletter* is a fortnightly 16-page supplement with literacy activities, reading advice and tips to help make reading and story telling a part of children’s everyday lives

information from the internet and few indicated visits to the library. They used the basic keywords search as provided by the Google and Pinterest search engine interface. The participants indicated that when they visited the library, they browsed the children section shelves on their own and will ask the librarian only when necessary. The respondents further described they have not used the information retrieval systems, such as the online information databases to search and access information. While the respondents at private and independent schools used the internet and applied a simple basic keywords search with no knowledge of other search techniques to search for information. Only one respondent from the private and independent schools indicated that she used and visited the library quite often. However, the key informants indicated there are a number of online ECD subscription databases that are available to ECD practitioners. The observation is that practitioners lack initiative to look and search for information a situation she described as ‘unfortunate’.

#### 4.2.8 Are there any factors that inhibit you from accessing the information that you need?

The theoretical model adopted by the study recognised that in the process of seeking information there are factors that may either prohibit or facilitate the finding and use of information, which means that the final outcome can be successful or unsuccessful. All the respondents were very vocal in indicating that the nature of their work and profession is very demanding considering their work roles and responsibilities. Most respondents indicated that they start work at 6h30 until 17h00 every day.

Participants from Group PS 3: *Once you are in the class you must devote your attention to the children which is between 8h00 until 13h00 there is no **time** to do other things and thereafter is aftercare until 17h00*”. Quoting Steve Jobs: ‘The most precious resource we all have is time.’

The geographic location and access to computers and internet was also identified as a limiting factor to access information. Only a few respondents indicated that they can walk or drive to the library because of their proximity or found themselves within a close walking radius of less than 1 km. *We ask the clerks/secretaries at our schools to search or look information for us because they have laptops and can access the internet.*

The majority of respondents who lived or worked very far from the library cited the **costs** associated with transport, and the fact that they had inadequate skills to access and make use information sources both electronic and paper,

Participants from Group PS 2: *Data is very expensive even though some of us have personal smartphones and laptops but we cannot have access to Internet and emails, you have to make your own plan using your own money.*

The lack of computers and internet access available to respondents from public schools, in community and home centres was a factor, although in private and public schools they have full access to the internet, some complain about the reliability of the Telkom network ADSL line.

In summary, time, cost and an inability to access both the physical library and electronic sources of information was the major barrier. The cost factor was highlighted during the interview with the key informant, who reported that the EMM is currently busy with an initiative to roll out free Wi-Fi to all the ECD centres to address the cost factor of accessing internet.

Language was also mentioned as a barrier by almost all participants, because most of the ECD materials are in English, and the schools follow the Department of Education language policy, especially in the townships schools which cater for Sesotho-, Setswana-, and IsiZulu-speaking children. Participants indicated that they are expected to translate from English to the vernacular languages and some of the words are difficult to translate' such as '*maadingwa*' simply means translation of borrowed word from English to Setswana. The same applies to Afrikaans-speaking schools.

Participants from Group PS3: *We are an Afrikaans speaking school most of the Grade R materials we received from the department of education are in English, and we must first translate them to Afrikaans.*

#### 4.2.9 How would you like the EMM libraries to help you to address your information needs?

This question ignited excitement amongst some participants. The response to the question was initially started by participants describing their point of view, perceptions and experience of the current library service. These responses can be described as positive, neutral and negative, simply because participants recognised the importance of information and secondly, because those whose responses were neutral indicated that they never used the library or were not aware that they could become library members. Lastly, those whose experiences was negative indicated that their experiences with the EMM library staff were that the staff were not responsive. In pursuing this point further another participant shared an experience that when she went to the library looking for information, she received little attention or assistance from the library staff. A very different experience occurred when she visited a neighbouring library from Johannesburg Public Library service. The question she asked herself was that how different is this library service from the one in my municipality?

*Participant from Group PS 1: I do not use the library. I had a bad experience with no assistance from the library staff at GOBA, our local library. I entered the library and told the librarian that I am doing an assignment about languages, the librarian just pointed me to the shelves, I did not know where to start, I was lost and left without any help. I left and went to Johannesburg Public library in town, approached the receptionist, asked the receptionist that I am need this information, she said let me check it for you from the computer and most of the books were not available in the library but she gave me the names of the nearby libraries in Soweto where the books are available. She thought I was from the City of Johannesburg. Why the librarian at my local library did not do the same? Some people don't like their jobs, their attitude is bad.*

These experiences back the principal objective of the researcher, that being to prescribe any improvements and efficiencies in the provision of a LIS. LIS practitioners are expected to know or understand the information-seeking behaviour of their users. Further, if these practitioners claim that libraries are for communities, they need to answer the following questions, first, how well do they know the communities they serve? Secondly, is the collection relevant to their user's needs? In summary, the participants' responses to this question can be put into three categories, namely

positive, neutral and negative. Participants suggested an improvement to the EMM LIS to address some of its negative aspects:

- Travelling or mobile library
- Educational toys
- Active librarians to promote libraries and reading
- Audio books/DVD/3D books
- Expansion of free Wi-Fi to home-based ECD centres
- Big picture books/educational charts
- Vernacular/indigenous language books with an emphasis on bi-lingual dictionaries. These are linked to the response from the key Informant proposing that EMM libraries must develop outreach programmes to promote their services to ECD practitioners, to encourage the borrowing of books to ECD centres and coordinate services by and to all relevant stakeholders.

#### 4.3 Conclusion

The research findings uncovered interesting aspects about the information needs and information-seeking behaviour processes of Grade R practitioners. Furthermore, they posed concerns as to how practitioners feel about the way general society perceives their work and profession, despite the government's commitment to the importance of ECD. The next chapter reports the findings, draws conclusions based on both the theoretical and practical implications of the study and proposes recommendations for future research undertakings.

## CHAPTER 5

### FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1. Introduction

In this chapter, major findings will be presented and, based on these, conclusions are drawn and recommendations made pertaining to the research questions. Each research question is examined and addressed based on the findings and, in some instance, the literature and the points of discussion from the theoretical framework. The recommendations are meant to improve the information-seeking behaviour of ECD practitioners by articulating a practical and achievable change desired to help the design of an appropriate service. Recommendations were constructed after the views of the ECD practitioners were noted and their information needs and information-seeking behaviour understood.

#### 5.2. Summary of findings

Based on the analysis and interpretation of data from the focus group discussions and the interview with the key informant, the findings drawn from the study are presented in this section according to the research questions.

##### 5.2.1 What are the information needs of Grade R practitioners at EMM?

The adopted theoretical framework acknowledges that information needs and information-seeking behaviour is influenced or affected by a combination of inter-related variables that arise from the environment or context in which they are practiced. The aim of this question was to examine how the organisational context, focusing on roles, responsibilities and tasks, influence the information needs and information-seeking activities of Grade R practitioners.

Data revealed that, within their work environment, there is a general lack of understanding of Grade R practitioners' roles and responsibilities. Seemingly, various stakeholders do not understand these responsibilities and fail to regard ECD practitioners as professionals. The Grade R practitioners' view is that stakeholders are critical and often do not provide them with the necessary support and

help them to achieve their primary tasks of quality teaching and learning. Grade R practitioners, given the nature of their roles and tasks, need competencies and skills to perform their tasks and continue to be relevant in their profession. All focus groups revealed some confusion on how the community generally perceived their profession. There is a lack of understanding of these practitioners' roles and responsibilities and their undermining them to an extent that the Grade R practitioner is not a professional and their role is unimportant. With this in mind, advocacy and campaigns to support ECD centres in Ekurhuleni in various ways is recommended in the study. For instance, the public could support the centres with resources such as empty food containers (e.g., yoghurt and ice cream tubs, boxes, paper rolls and cardboard), that we generally throw away in bins. This will not only help ECD centres with resources for learning materials but it will also be waste management in our communities.

The profession of the ECD practitioner is associated with education. It entails the holistic development of a child through play and prepares them to be ready for schooling. The participants, particularly among those who are educated with diplomas and bachelor's degrees, were clear that they are in a teaching profession. The downside is that there are unqualified ECD practitioners, particularly in the townships, who did not go through any compulsory training. As a result of their inability to carry out their duties professionally, the public tends to generalise that Grade R practitioners are not professional. Unfortunately, there are centres and practitioners that have not registered with SACE, even though the law requires them to do so.

Despite these challenges, the study identified ten work roles and responsibilities within the practice that requires information, namely, that of manager (principal or HOD), parent, social worker, administrator, nutritionist, counsellor, first aider, caregiver, information provider and service provider. Because they have to perform these roles that are linked to their responsibilities, they trigger certain tasks such as constantly observing learners' health and emotional status. Related to roles are the responsibilities, for based on the data, all participants assumed a number of other responsibilities in addition to their work roles. These responsibilities include serving in various governance committees, participating in extra-mural sporting activities and spiritual responsibility, health, safety, cleaning and storeroom safekeeping. In relation to tasks associated with roles and responsibilities, the findings revealed that teaching through play and organising resources are the

main tasks of Grade R practitioners. They devote most of their time to planning, doing assessments, keeping records, completing reports cards, keeping an up-to-date observation book to record each child's progress. These roles, responsibilities and tasks have created information needs that should be met. Therefore, the EMM Libraries Service is advised to work on designing, information packages for ECD practitioners that cover all the areas alluded to earlier, such as nutrition, social work, health and safety, etc. The information package should be updated regularly.

Given that all the Grade R practitioners that participated in the study were female, one can conclude that this profession is dominated by females. This shows that our society is still patriarchal and associates the profession of childcare as the preserve of women only. Unfortunately, many sectors that are female dominated are still undermined. It is not surprising that the Grade R practitioners articulated that the public has a negative view of them. This creates a gap, for these practitioners need to acquire information that will help them convince their stakeholders of the importance of the role of ECD practitioners. It is also viewed as a broader public information need that has to be addressed to change the societal mind set from gender segregation and undermining women-led sectors.

From the data collected, the study found that Grade R practitioners' information needs fall into four major categories. If they can find information in these categories they are likely to cope, close the knowledge gap and perform their roles, carry their responsibilities and achieve the tasks with ease. The four categories came out as triggers for Grade R practitioners that participated in the study to engage in information seeking. These categories are:

- ECD curriculum design, delivery and evaluation.
- Policy and governance including legislation on ECD
- Social, economic, political and environmental trends that impact on ECD.
- Child development in its entirety.

If an information service is designed, in the form of a simplified information package for the unqualified ECD practitioners, hopefully their services will improve given that some of them have gained a lot of experiential leaning in the process. It is only a matter of providing them with an information support system that could include resource sharing.

These findings are complemented by similar findings conducted by Summers et al. (1984:126), who investigated the relationship between education position and purpose in information seeking and the sources used by Canadian educators to address the following gaps in the work context:

- (a) finding new materials,
- (b) facts for classroom,
- (c) awareness of trends, and
- (d) teaching techniques.

Shafique and Mahmood (2013:26) conducted a study by reviewing research studies investigating information needs and the information-seeking behaviour of an educational administrator and other stakeholders. The review found that the information needs of educational administrators are to perform routine tasks, planning and budgeting. The objective of the study was to ascertain the information needs of Grade R practitioners. Therefore, it is clear that the finding concludes that Grade R practitioners have a great interest in curriculum-related information, various child-oriented topics and current legislation, and their own personal information. These information needs are triggered as result of their positions and other factors affecting their environment, as indicated above.

#### 5.2.2. Which information sources do Grade R practitioners prefer and often use?

The objective of this study was to establish the main information sources preferred and used often by Grade R practitioners to fulfil their roles, responsibilities and associated tasks. The theoretical framework showed that awareness and access to information sources influence their use and information-seeking behaviour. The study found that existing varieties of both formal and informal information sources were often used and preferred by practitioners. In the affluent centres their needs, in the order of their preference are the internet, particularly the search engine Google; social media, particularly Pinterest because of its attractive images; and asking a colleague or other professionals and personal contacts. In the poorer centres, the order of preference is newspapers and magazines; particularly the *Nali'wali Newsletter*. Magazines are useful to help children during activities such as cutting, which is a very important exercise used to develop small muscles such as those used in fine motor skills; they also have images that serve as good learning material.

The study found that the participants consult policy documents and legislation (gazettes) to keep up to date and comply with health and safety laws. In the classrooms they have books, scheduled TV educational programmes and time to listen to radio talk shows with interesting and relevant children-related topics. These findings are consistent with the literature review conducted, confirming that majority of teachers use internet search engines, in particular Google, to search online information (Diekema & Olsen, 2014:2271). A study conducted by Shipman, Bannon and Nunes-Bufford (2015:120) found that the traditional information sources commonly used by teachers relied on, newspapers, magazines, internet, personal contacts, or asking a colleague. Bitso and Fourie (2011:186) also found that teachers also considered newspapers and TV as sources of information. It is recommended that the EMM libraries, as part of their information service to Grade R practitioners, regularly source and donate old magazines to ECD centres, particularly in the townships. The EMM libraries should acquire resources such as DVDs, CDs, posters, etc., that have information related to the ECD curricula and activities. It is recommended that a website is designed and maintained with the help of the Department of Education that will serve as an information hub/portal for ECD practitioners. That being said, the centres in the townships should be provided with computers, printers, internet connectivity and free Wi-Fi.

The majority of participants indicated that they have no knowledge or lacked an awareness of information sources, such as online databases that could be accessed freely on the internet. Moreover, the majority of ECD practitioners were not aware that there are children books in public libraries that they could borrow if they are registered as library members. There is a need, therefore, for the EMM libraries to vigorously market its existence and services to ECD centres and to design designated programmes for ECD. The study found that Grade R practitioners lack awareness of their own information environment, for example, a knowledge of libraries close to them and free online databases that could be exploited.

Concerning the format and quality of information sources, practitioners prefer Big Picture books because children in Grade R cannot read so they use picture books during storytelling to develop both listening and visual skills. Consequently, there should be a service by EMM libraries of box loans of Big Picture books to schools. Despite advancing digital landscape and increasing

utilisation of e-books, print books are still the most preferred information sources since the information must be in visual format for children to be able to see. However here is a need to balance access to a variety of resources so that different information needs are met. For instance, in one of the private schools where focus groups discussion was held, the Grade R class is fully equipped with ICT equipment such as an overhead projector, WI-FI connectivity and an electronic chalkboard. Using this technology, the teacher was able to demonstrate how to access electronic picture books. The study identified the role of Information Technology as a benefit to improve access to information for Grade R practitioners.

### 5.2.3. What actions and strategies do these practitioners often use to search and access information?

The information-seeking process and the ability to search and access different information sources to satisfy information needs, depends on the individual's information-seeking skills. This includes aspects related to the need for and use of information and the activities associated in the process. Therefore, the objective of the study was to investigate the strategy used by Grade R practitioners to search for information. The study found that Grade R practitioners used the same basic technique, a practice that could be attributed to lack of or inadequate search skills. All practitioners across the three ECD facility types indicated that they used basic key \word searches for information retrieval strategies to search for information on Google and had never interacted with other online educational databases despite their availability. One thought that an educated Grade R practitioner, in a resourced private school would have used online databases; or at least should have used them at some stage while studying for their degree at the university. A few who visit the library just browse the shelves on their own and never ask for assistance from the library staff.

The findings are similar to a study conducted by Diekema and Olsen (2014:2274) that found that searching for information is a difficult task for teachers, citing that often they are not sufficiently equipped to search for information effectively and as a result the user is not able to satisfy his or her information need. Thus, the present findings conclude that lack of information literacy skills is therefore identified as a gap, which is perceived to be one of the most important activities that affect the outcome of information retrieval.

#### 5.2.4. What factors inhibit Grade R practitioners from accessing information?

The research objective was to establish factors that may prevent Grade R practitioners from seeking information. The model adopted to frame the study also provided a theoretical aspect that explains that, in the process of seeking information, one can encounter factors that either facilitate or inhibit the finding and use of information. Four major challenges and barriers impacting on information access were identified in this study:

- (a) Time constraints – This was highlighted as the major factor. Grade R practitioners are overstretched and work conditions require them to work for long hours.
- (b) Cost – Practitioners relied on and preferred internet as a major source to access information. The high cost of data is inhibiting information access from the internet; purchasing of data bundle and airtime is costly especially to practitioners in the public- and- home-based centres. In addition, the high cost of transport to visit libraries in many townships is an inhibiting factor to information access. A study by Clarke et al. (2013:186) identified geographic location as a barrier to access information sources; as a result, it influences information-seeking behaviour. The EMM has to acquire buses and offer mobile library services to reach out to ECD centres.
- (c) Information search skills – inadequate or lack of information search skills inhibit access to and use of online information sources.
- (d) Language – this was highlighted as a barrier because most of the ECD resource materials available are in English, and the schools in the townships cater for Sesotho, Setswana-, and IsiZulu- speaking children. English is also a barrier to Afrikaans schools in the suburbs (in line with the education home-language policy). The study found that practitioners are expected to translate English to vernacular languages, including Afrikaans, and some of the words are difficult to translate.

In conclusion, most of the barriers identified in this study confirm the findings found in Clarke et al, (2013:186), Du Preez, (2010:14), Davis, (2007:78–79) that identified a number of similar barriers commonly related to information-seeking for professionals. It therefore recommended that the EMM libraries consider including in their services mobile libraries and block loans for ECD centres and also outreach programme to ECD centres — these must be delivered to and collected from the centres. Also identified was the need for Information literacy training for EDC

practitioners; advocacy for a lowering the cost of internet data; and the provision of information sources in Afrikaans, IsiXhosa, Sesotho and IsiZulu that are the predominant languages in the EMM.

5.2.5 Is there a correlation between qualification level and information needs; strategies for information searches and access; and information sources often used?

The purpose of this question was to establish if there is any correlation between qualification level, information needs, and activities undertaken to search and access information and often used sources. It was found amongst the seven focus groups that, regardless of one's qualifications and educational background, there was no connection between qualifications and the influence on the information-seeking behaviour of Grade R practitioners. All participants find searching for information to be a challenging task. They have used only basic search skills on Google and were not able to evaluate the quality of information obtained on the internet. Practitioners' lack information literacy skills. There is need for information literacy programmes for the practitioners, to help them improve their information search and information evaluation skills. The programme should bring to their attention some open access information sources that they could easily use online. There is need for more awareness of potential information sources around them. While browsing library books shelves is good, it is important that they are conscientised that it is not the only method that one can use to access library resources. Pre-service ECD training should have a designated information literacy programme so that the practitioners acquire the necessary skills while they are at universities and colleges.

It is important at this stage to recognise Zinn's 2012 study that established that there is dire need for or shortage of library and information services in schools. It also recommended that information literacy education should form part of pre-service teacher training and practicing teachers to receive effective information literacy training.

5.2.6 Which information services do Grade R practitioners in EMM require?

The study aimed to help inform the design of an information system or service that is appropriate to serve the needs of practitioners as customers and potential recipients of the service. Participants

who used the library were critical of the current library services, indicated that they would like to see a different attitude from the library staff and found the services to be inadequate. The study findings discovered that Grade R practitioners do not use the library despite expressing a positive attitude towards the library services by acknowledging that information is a critical and very important tool for the execution of their tasks. Participants were very positive about what they think the future library services should offer and recommended an improvement to the library service. The following services were suggested:

- Travelling or mobile library
- Educational toys
- Active children librarians to promote libraries and reading
- Audio books/DVD/3D books
- Expansion of Free- Wi-Fi to ECD centres
- Big picture books/educational charts
- Vernacular/indigenous language books including bi-lingual dictionaries. The findings conclude, that based on the information gathered, the current library services are inadequate to meet the information needs, in particular of Grade R practitioners.

J. Raju and R. Raju (2010:08) and Hart (2004:111) point out that ‘community libraries are institutions of [the] education system and should embrace themselves to cope with the entire value chain of our education system in order to support the development agenda in democratic South Africa’. As indicated in chapter 1, since the introduction of CAPS in 2014 for Grades R, the policy changes require Grade R practitioners to possess not only specialised professional skills and knowledge, but also to have access to accurate, reliable and timely information. The researcher argues that education is a long-term project. Therefore urgent action is necessary and requires community libraries to be key development partners. This provides a basis for the EMM LIS to provide support to the ECD practitioners and improve the quality education system to achieve aspirations of the NDP and the UN 2030 Agenda and Sustainable Development Goals (SDG’s) (Hart & Nassimbeni, 2016:199). Fourie (2007:02) argues that ‘libraries should not just be superficially open to all. They should address all primary needs that can be linked to information needs and access to information.’ Therefore, community librarians can no longer claim to be

victims of the current educational changes, but should rather seek to improve availability and efficiencies in the provision of information for educators.

As shown in the findings, it is recommended that to satisfy and address the demands for Grade R practitioners' information needs and information-seeking behaviour, the EMM libraries and the GDE school libraries should consider a coordinated and accessible library and information service that supports and addresses the information needs resources, as identified in the study. Also recommended is that both authorities should capitalise on the current library and information services; information resources and infrastructure; consortium and resource-sharing ethos; and principles of open access to improve the provision and broaden access to information, support learning and quality education.

### 5.3. Conclusion

The aim of the study was to investigate the information-seeking behaviour of Grade R practitioners using the Leckie, Pettigrew and Sylvain (1996) model as a theoretical framework, and to recommend an appropriate information service. It identified the reasons for information-seeking activities that relate to Grade R practitioners as individuals in their course of their professional work. The findings showed that information-seeking activities are embedded in their roles, responsibilities and associated tasks. It also found that searching for information is a challenging task that affects the outcome. This study presents an opportunity to EMM community library and information services together with the Gauteng Department of Education to be innovative and to create a better user experience by transforming its services and to appeal to and accommodate the new needs of the marginalised group such as ECD practitioners. The recommendations, if implemented, will improve educational efficiency as Grade R practitioners can focus on their primary tasks of teaching, thus reducing the burden of spending time to identify, and access reliable information resources to supplement the lesson plan material. It is, therefore, the researcher's opinion that the achievement of the aspirations of the NDP vision and domestication of global developmental goals is at risk if the practical implications of this study are ignored.

In summary, the practical and theoretical implications of this study are that the research report can be used by the stakeholder departments to priorities their operations to improve service delivery.

It also helps to create awareness and a better understanding of Grade R practitioners' information environment, including the challenges and opportunities impacting their information-seeking processes. On the other hand, the use of the theoretical framework was successful, for it helped the researcher to understand and uncover the information-seeking activities and the organisational context of Grade R practitioners in the EMM. It confirms the notion that the practical implications of any empirical study are to contribute to finding practical solutions using tested scientific methods and drawing upon existing framework or theories.

#### 5.4. Recommendations

Confirmed in the findings was that work-specific information needs exist among Grade R practitioners and this justifies the establishment of an information service designed for them. The EMM library and information services must promote the development of community library and information services that serve the expressed needs of this clientele in the municipality. Libraries are for communities and how well do we know the communities we serve?

Over and above the recommendations made earlier in this chapter, the following information service delivery model is proposed, bearing in mind that there are financial and human resource implications. Therefore, the implementation of the proposed interventions will require technical assistance in the form of training for ECD practitioners and a change of attitude from the EMM library staff to be in line with the principles of *Batho Pele*:

- Establish children-biased library services. It is highly recommended that there is need for a dedicated children's librarian post in all the EMM libraries to support an improved access to information to the ECD centres.
- Develop and maintain alerting service, such as current awareness and selective dissemination of information, to meet the information needs of Grade R practitioners by conducting research on the curriculum, liaise with practitioners and provide regular updates on information on curriculum-related themes and children-specific topics of interest.
- LIS advocacy and reading awareness programmes to market and promote the importance of libraries to ECD practitioners, parents and children.

- Determine ECD-focused information services indicators to measure the impact outcomes of such programmes implemented in the libraries, by developing standardised procedures for delivering a wide range of ECD LIS programmes across all EMM libraries to promote consistency in the delivery of such services such as storytelling, toy libraries, etc.
- EMM library and information services must facilitate and promote awareness on information literacy initiatives and ICT skills by providing regular training and capacity building on information retrieval skills to empower and capacitate ECD practitioners to be independent information seekers.
- Both the Gauteng Department of Education and the EMM LIS should build and sustain a close working partnership to introduce and expand the current mobile library service and conduct regular and consistent visits to ECD centres and schools. The demand for this service was expressed by all participants interviewed emphasizing the point that most children who are in Grade R never visited the library. Also very few schools have media centres. This calls upon community libraries to overcome the situation. They all agreed that creating a culture and habit of exposing children early in life to reading is a very important experience in the child-learning journey to become independent learners.
- Expand and increase high speed free Wi-Fi to ECD centres.
- Improve communication between EMM LIS and Grade R practitioners.

## 5.5. Possible research undertakings

### 5.5.1 Emerging topics/themes emanating from the current study

- Understanding the information needs of community-based ECD centres in rural areas, considering that the current study area focused on an urban metropole;
- Establishing the information needs of pre-service ECD practitioners and those on internships;
- Assessing or evaluating library and information programmes targeting ECD centers;
- Investigating how information systems and ICT should support information needs of all ECD practitioners.

The interpretive, qualitative case study surfaced many important points that cannot be generalised; but which should be used to construct a detailed questionnaire to survey all the ECD centres and

Grade R practitioners in the EMM, so that the municipality will be in a position to generalise and design information systems based on the majority of ECD centres in the EMM. The questionnaire can be adapted to survey other municipal libraries in South Africa.

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## Appendix A: Informed consent for participants

I am Kepi Madumo, a Masters student from the University of Cape Town, Library and Information Science Centre. I am currently researching the Information needs and information-seeking behaviour of Grade R ECD practitioners in Ekurhuleni.

I politely request your time to participate in a focus group discussion. I would like to ask you a few questions related to your information needs and the way you search for and access information as a Grade R practitioner. There is no right or wrong answer; your responses will be treated with confidentiality and anonymised before presentation. Your identity will not be revealed in any way when the data is presented. Your participation in this study is voluntary and you do not have to answer any question that makes you uncomfortable. Only with your permission will the interview be recorded. You can end the interview at any point and you will not be penalised if you choose to withdraw. Likewise, there is no potential for victimisation should you choose not to participate.

The data collected will be used in the master's dissertation, journal articles and conference presentations. You will not benefit directly from participating in this study. However, the results of the study will be used to improve the information service delivered by Library and Information Services in Ekurhuleni for Grade R practitioners.

The study is conducted under the supervision of Dr Connie Bitso (021 650 2488; connie.bitso@uct.ac.za ) and conforms to the ethics standards of the Faculty of Humanities, University of Cape Town.

If you have any queries relating to this study please contact me or my supervisor: Kepi Madumo, Cell: 083 357 3077 or 011 999 0509, email: MDMKEP001@myuct.ac.za

Confirmation of Informed consent to participate in the study:

(Please initial at the end of each line if you agree)

I understand the background of this study and have asked any clarifying questions I wish\_\_\_\_\_

I understand participating is voluntarily and may withdraw at any point \_\_\_\_\_

I agree to this discussion being recorded \_\_\_\_\_

I \_\_\_\_\_agree to participate in the study described above.

(Signature)\_\_\_\_\_

Date:\_\_\_\_\_

Researcher Name:\_\_\_\_\_

(Signature)\_\_\_\_\_

Date:\_\_\_\_\_

## **Appendix B: Focus group discussion schedule**

1. Please tell me about your work (profession) as a Grade R practitioner.
2. Which work roles do you have as a Grade R practitioner at your centre? By work roles, I am referring to being a manager, educator/teacher, service provider, information provider, caregiver, nutritionist, social worker, etc.
3. Which responsibilities do you have at your ECD centre? By responsibilities, I mean things such as being responsible for health and safety, food and nutrition, storeroom, supplies and maintenance, etc.
4. Which tasks do you have that emanate from your work roles and responsibilities? Tasks could be things such as reading, storytelling, report writing, listening, cleaning, feeding children, gardening, clearing off and locking up the space, etc.
5. What kind of information do you need to perform your work roles, take care of your responsibilities and achieve the tasks that you have at the ECD centre?
6. Which information sources do you prefer and often use to get the information that you need for your work roles, responsibilities and tasks?
7. Which strategies do you often use to search for and access information?
8. Are there any factors that inhibit you from accessing the information that you need?
9. How would you like the EMM libraries to help you to address your information needs? In other words, which information services would you need from EMM libraries?

Thank you for your participation

## **Appendix C: Key informant interview questions**

1. Please tell me about ECD practitioner, particularly Grade R, as a profession.
2. Which work roles do Grade R practitioners perform? By work roles, I am referring to being a manager, educator/teacher, service provider, information provider, caregiver, nutritionist, social worker, etc.
3. Which responsibilities do Grade R practitioners have? By responsibilities, I mean things such as being responsible for health and safety, food and nutrition, storeroom, supplies and maintenance, etc.
4. Which tasks emanate from their work roles and responsibilities? Tasks could be things such as reading, storytelling, report writing, listening, cleaning, feeding children, gardening, clearing off and locking up the space, etc.
5. What kind of information do practitioners need to perform their work roles, take care of your responsibilities and achieve the tasks that you have at the ECD centre?
6. Which information sources do you think practitioners prefer and often use to get the information that they need for work roles, responsibilities and tasks?
7. Which strategies do you often use to search for and access information?
8. Are there any factors that may inhibit them from accessing the information that they need?
9. How would you like the EMM libraries to help practitioners to address your information needs? In other words, which information services would they need from EMM libraries?

Thank you for your participation

## Appendix D: UCT, Library and Information Studies Centre Ethics Committee, Ethical Clearance



**Library and Information Studies Centre**  
University of Cape Town  
Upper Campus

Private Bag X1, RONDEBOSCH, 7701 South Africa  
Level 6 Hlanganani, Chancellor Oppenheimer Library  
Tel: +27 (0) 21 650 4546 Fax: +27 (0) 21 650 2529  
E-mail: [lisc@uct.ac.za](mailto:lisc@uct.ac.za)  
Internet: [www.lisc.uct.ac.za](http://www.lisc.uct.ac.za)

Ref. no.: UCTLIS201607-04

15 August 2016

Dear Mr Madumo

I am pleased to inform you that ethical clearance for the data collection for your master's study *The information-seeking behaviour of Grade R practitioners in Ekurhuleni Metropolitan Municipality* has been granted by an Ethics Review Committee of the Library and Information Studies Centre, Faculty of Humanities, on behalf of the University of Cape Town.

I wish you well with your study.

Yours sincerely,

Mr Richard Higgs

Chair, Department (LISC) Research Ethics Committee

## Appendix E: Gauteng Department of Education Research approval letter



For administrative use only:  
Reference no: D2017 / 229  
enquiries: 011 843 6503

**GAUTENG PROVINCE**

EDUCATION  
REPUBLIC OF SOUTH AFRICA

### GDE RESEARCH APPROVAL LETTER

Date:	12 August 2016
Validity of Research Approval:	12 August 2016 to 30 September 2016
Name of Researcher:	Madumo K.D.
Address of Researcher:	P.O. Box 11192; Centurion; 0046
Telephone / Fax Number/s:	011 999 0509; 083 357 3077
Email address:	MDMKEP001@myuct.ac.za; Kepi.Madumo@ekurhuleni.gov.za
Research Topic:	The information seeking behaviour of Grade R, ECD practitioners in Ekurhuleni
Number and type of schools:	TWENTY Primary Schools
District/s/HO	Ekurhuleni North; Gauteng East and Ekurhuleni South

#### **Re: Approval in Respect of Request to Conduct Research**

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved. A separate copy of this letter must be presented to the Principal, SGB and the relevant District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted. However participation is VOLUNTARY.

The following conditions apply to GDE research. The researcher has agreed to and may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

#### ***CONDITIONS FOR CONDUCTING RESEARCH IN GDE***

1. *The District/Head Office Senior Manager/s concerned, the Principal/s and the chairperson/s of the School Governing Body (SGB.) must be presented with a copy of this letter.*
2. *The Researcher will make every effort to obtain the goodwill and co-operation of the GDE District officials, principals, SGBs, teachers, parents and learners involved. Participation is voluntary and additional remuneration will not be paid;*

1

**Making education a societal priority**

**Office of the Director: Education Research and Knowledge Management ER&KM)**

9<sup>th</sup> Floor, 111 Commissioner Street, Johannesburg, 2001  
P.O. Box 7710, Johannesburg, 2000 Tel: (011) 355 0506  
Email: David.Makhado@gauteng.gov.za  
Website: www.education.gpg.gov.za

3. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal and/or Director must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.
4. Research may only commence from the second week of February and must be concluded by the end of the THIRD quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.
5. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.
6. It is the researcher's responsibility to obtain written consent from the SGB/s; principal/s, educator/s, parents and learners, as applicable, before commencing with research.
7. The researcher is responsible for supplying and utilizing his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institution/s, staff and/or the office/s visited for supplying such resources.
8. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research title, report or summary.
9. On completion of the study the researcher must supply the Director: Education Research and Knowledge Management, with electronic copies of the Research Report, Thesis, Dissertation as well as a Research Summary (on the GDE Summary template). Failure to submit your Research Report, Thesis, Dissertation and Research Summary on completion of your studies / project – a month after graduation or project completion - may result in permission being withheld from you and your Supervisor in future.
10. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned;
11. Should the researcher have been involved with research at a school and/or a district/head office level, the Director/s and school/s concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards



.....  
**Dr David Makhado**

**Director: Education Research and Knowledge Management**

DATE: *2016/08/15*  
 .....

## Appendix F: Ekurhuleni Research clearance certificate.



# EKURHULENI RESEARCH CLEARANCE CERTIFICATE

**Research Project Title:** The information seeking behaviour of Grade R, ECD practitioners in Ekurhuleni.

**Research Project Number:** 08/09/2016-3

**Name of Researcher(s):** Mr Kepi Madumo

**Division/Institution/Company** University of Cape Town

DECISION TAKEN BY THE EKURHULENI HEALTH DISTRICT RESEARCH COMMITTEE (EHDR)

- THIS DOCUMENT CERTIFIES THAT THE ABOVE RESEARCH PROJECT HAS BEEN FULLY APPROVED BY THE EHDR. THE RESEARCHER(S) MAY THEREFORE COMMENCE WITH THE INTENDED RESEARCH PROJECT.
- NOTE THAT THE RESEARCHER WILL BE EXPECTED TO PRESENT THE RESEARCH FINDINGS OF THE PROPOSED RESEARCH PROJECT AT THE ANNUAL EKURHULENI RESEARCH CONFERENCE.
- THE RESEARCH COMMITTEE WISHES THE RESEARCHER(S) THE BEST OF SUCCESS.

\_\_\_\_\_  
DEPUTY CHAIRPERSON: EKURHULENI METROPOLITAN MUNICIPALITY

Dated: 13/09/2016

Dr. R. Kellerman

\_\_\_\_\_  
CHAIRPERSON: GAUTENG DEPARTMENT OF HEALTH (EKURHULENI REGION)

Dated: 13/09/2016

## Appendix G: Letter to the principal, permission to conduct research

City of Ekurhuleni  
Department of Sport, Recreation, Arts and Culture  
Private Bag X25  
Edenvale  
1610

The Principal  
**Name of the School**

**SUBJECT: Permission to participate in the Research study: Information-seeking behaviour of Grade R, ECD practitioners in Ekurhuleni.**

I am a Masters student from the University of Cape Town conducting research on the Information needs and information-seeking behaviour of Grade R, ECD practitioners in Ekurhuleni. This investigation is eventually aimed to help and inform the design of an information system and service that is appropriate for these practitioners so that they can perform their work roles, tasks and responsibilities with ease to support learning.

I politely request that a staff from your school responsible for teaching Grade R is granted permission to participate in the study. The data collection method is a focus group discussion which consists of 9 questions and will take 20-35 minutes. I will be in contact with you once I receive your reply and completed consent form to participate in the study so that I can finalise the date and time for the focus group discussion. **Please complete and return the attached consent form.**

The study is conducted under the supervision of Dr Connie Bitso (021 650 2488; email, [connie.bitso@uct.ac.za](mailto:connie.bitso@uct.ac.za)) and conforms to the ethics standards of the Faculty of Humanities, University of Cape Town. If you have any queries relating to this study please contact me at Cell: 083 357 3077 or 011 999 0509, email: [MDMKEP001@myuct.ac.za](mailto:MDMKEP001@myuct.ac.za)

Your support in this study is greatly appreciated.

Mr Kepi D. Madumo (Researcher)