

**INFLUENCE OF THE AVAILABILITY OF SCHOOL LIBRARIES ON THE READING  
ATTITUDE AND READING ACHIEVEMENT OF PRIMARY SCHOOL LEARNERS IN  
SOUTH AFRICA**

by

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## DECLARATION

I, Johanna Jacoba Knoetze, student number 53939824, declare that *Influence of the availability of school libraries on the reading attitude and reading achievement of primary school learners in South Africa* is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references. I further declare that I submitted the thesis/dissertation to originality checking software and that it falls within the accepted requirements for originality. I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.



Signature

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## SUMMARY

Given the importance of the ability to read, learners must have access to books in schools. The lack of functional school libraries in South Africa, especially in primary schools, is to the detriment of learners' reading achievement. In the 2011 Progress in International Reading Literacy Study (PIRLS) study, Grades 4 and 5 children achieved the lowest scores in the reading comprehension tests of the 40 participating countries. The researcher proposes that one intervention that would help solve the low levels of reading literacy among learners would be for schools to have an official school library policy, and to have functional well-stocked school libraries. This study seeks to identify the self-reported reading attitudes of learners who took part in the PIRLS 2011 study using a secondary data analysis, and to investigate by means of a systematic literature review, materials published between 1994 and 2017 on the non-implementation of school library policies. This study recommends speeding up progress in meeting minimum norms for school infrastructure in order to create a space for functional school libraries in all schools. Secondly, it suggests that access to books for primary school learners should be improved, and lastly, that the national guidelines for school libraries on planning and reforming school libraries should be finalised and implemented.

**Key terms:** classroom libraries, learners, PIRLS 2011, policies, primary schools, reading attitudes, reading culture, school libraries, secondary data analysis, systematic literature reviews

# *Soli Deo gloria*

## **DEDICATION**

I would like to dedicate this dissertation to my late husband, Jan George (Johan) Knoetze, the love of my life, who has been and will always be my source of inspiration and whom I miss every day, and to my daughter, Jana, for her unconditional love and support.

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# Chapter 1

## Introduction and Background

### 1.1 Introduction

Worldwide, more than 617 million children and adolescents do not seem to be achieving minimum proficiency levels in reading and mathematics according to the UNESCO Institute of Statistics (UNESCO Institute of Statistics [UIS] 2017:1). Of these, 202 million children are from sub-Saharan African countries. New UIS information reveals “that 88% of all children and adolescents will not be able to read proficiently” on completing their primary education (UNESCO Institute of Statistics 2017:7).

These poor proficiency levels in reading and arithmetic directly influence the progress of Sustainable Development Goal (SDG) number 4, which has the target of achieving inclusive and quality education for all (UNESCO Institute of Statistics [UIS] 2017:1). The seventeen SDGs build on the success of the Millennium Development Goals, “which started a global effort in 2000 to tackle the indignity of poverty” (UNDP 2018). According to the United Nations Children’s Fund (UNICEF 2016:42), worldwide “38% of children leave primary school without learning how to read, write and do simple arithmetic”. In South Africa, this is reflected in the poor results of the 2006, 2011 and 2016 Progress in International Reading Literacy Study (PIRLS) surveys for South African learners. In the PIRLS 2006 study, learners from South Africa achieved the lowest scores of the 40 participating countries, with approximately 80% failing to reach the Low International Benchmark (Howie, Van Staden, Tshele, Dowse & Zimmerman 2012: 6). In 2011 prePIRLS, a less difficult assessment was introduced for countries whose performance was low in the PIRLS 2006 study. In South Africa, Grade 4 learners took part in prePIRLS and Grade 5 learners in the PIRLS study. The results of both grades again “indicated

that learners in both grades were battling to develop the reading literacy competencies needed to make a successful transition to reading to learn in the latter primary school years” (Zimmerman & Smit 2014:1). The most recent PIRLS 2016 review found that eight out of ten Grade 4 learners in South Africa cannot read for meaning. In an open letter intended for the successor of South African President Jacob Zuma, Spaul and Carel (2017) wrote:

What South Africa needs is a Marshall Plan for Reading. We need *you* to use *your* presidency to mobilise our country behind one goal: That all children can read for meaning by the end of Grade 3 ... When eight out of 10 of our children can't read for meaning, overcoming this challenge might seem impossible. But insurmountable problems are not new to our country. In 2000, at the peak of the AIDS crisis, who would have thought that four million South Africans would now be on antiretrovirals? Or that the ANC government would ultimately mobilise the country to build the largest AIDS treatment programme in the world?

The fact that Grade 4 learners cannot read has serious implications for later learning and consequently they will not be able to cope with the demands of the curriculum. This indicates that interventions to support learners' reading development are needed. The researcher proposes that one intervention that would help to solve the low reading literacy of learners is for schools to have an official school library policy and to have functional well-stocked school libraries.

A substantial body of research, including studies and reports, suggests that there is a positive link between access to books, school libraries and reading achievement in children (Lonsdale 2003; Todd & Kuhlthau 2005; Achterman 2008; Gildersleeves 2012; Krashen 2013). It also confirms that school libraries are important and have an impact on the development of children's reading (Lonsdale 2003; International Federation of Library Associations 2006; *School Libraries Work!* 2008; Kachel 2013). Neuman and Celano (2012) state that functional resource-rich school libraries play a key role in the

promotion of reading. The role of school libraries is further clarified by the American Association of School Libraries (AASL 2018), which has published a set of six common beliefs derived from earlier documents and feedback collected from more than 1300 librarians. This summarises the qualities of well-prepared learners, effective school librarians and dynamic school libraries. The six common beliefs are the following:

The school library is a unique and essential part of the learning community; qualified school librarians lead effective school libraries; learners should be prepared for college, career, and life; reading is the core of personal and academic competency; intellectual freedom is every learner's right and information technologies must be appropriately integrated and equitably available.

Given the importance of the ability to read, learners must have access to books in schools. The lack of functional school libraries in South Africa, especially in primary schools, therefore seriously impedes reading achievement in learners (Equal Education 2010; Howie et al 2012; Paton-Ash & Wilmot 2013). A report on school infrastructure by the National Education Infrastructure Management System (NEIMS) database (Department of Basic Education 2016:5) states that 70% (18 106) of South African schools do not have a library. Of the 29% (5471) with libraries, only 17% (3318) indicated that their libraries are "stocked". It can thus be deduced that only 17% (3318) of schools have a potentially functional library. It was also confirmed in the Progress in International Reading Literacy Study (PIRLS) 2011 that South Africa is one of the countries with the lowest number of school libraries (Howie et al 2012:xviii). Howie et al (2012:xviii) further state that "shortages of reading resources and lack of infrastructure, such as school libraries and poor working conditions, are strongly associated with poor achievement".

In the 2011 PIRLS study, children in Grades 4 and 5 achieved the lowest scores in the reading comprehension tests (Mullis, Martin, Kennedy & Foy 2007; Howie et al 2012). The learners performed nearly "80 points below the international average score of 500" (Howie et al 2012:xvi). Accordingly, the achievement levels of South African Grade 4

learners were similar to learners in Saudi Arabia, Indonesia, Qatar and Botswana (Howie et al 2012:xvi).

Howie et al (2012:xvii) further note that effective reading is hampered in under-resourced schools:

More than half of the learners in the Grade 4 sample came from schools with no school libraries and [the learners from] these schools achieved, on average, 155 points less than schools with well-resourced libraries. One in five learners attended a school where the inadequacy of the resources was reported to be hampering teaching and learning.

The inadequacy of resources and functional school libraries is further hampered by the legacy of apartheid and the lack of implementation of school library policies.

During the apartheid era, schools were racially segregated and separate departments of education existed for the various racial groups, with the education for white children being better funded than the other groups (Dlamini & Brown 2010:1). These past segregation policies are still linked to unequal education (Jiyane, Fombad & Mugwisi 2016:45). Hart (2014:2) concurs that the “disparities in quality between the historically white sector of schooling and the historically black sector in South Africa are still evident”. In 1990, the National Education Co-ordinating Committee (NECC) commissioned a National Education Policy Investigation (NEPI); the report of which was published in 1992. The NEPI report provides a framework for education policies after apartheid (Jansen & Christie 1999:4). Additionally, the NEPI published twelve sectoral reports of which one dealt with the Library and Information sector (Le Roux 2002:113). Le Roux (2002:113) states in this regard that a gap was to be observed in this report between the vision and role of school libraries and the actualisation of the aims of official policies. Furthermore, in the South African Schools Act, which was passed in 1996, no mention was made of school libraries (Hart & Zinn 2007:92).

In 2012, the Department of Basic Education published the National Guidelines for School Library and Information Services (Mojapelo & Dube 2017:220). These guidelines are not yet nationally approved as a policy document. A positive development was the commissioning of a Library and Information Services (LIS) Transformation Charter by the National Council for Library and Information Services (NCILS) in 2009, which was approved by government in 2014 (Nkondo, Brown, Dick, Hart, Molawa, Nassimbeni, Seleti & Teffo 2014:5, Department of Arts and Culture 2018:1). One of the top priorities in this Charter was the formulation of a national LIS policy. “The Department of Arts and Culture commissioned the National Council for Library and Information Services (NCLIS) to initiate a project to formulate a national LIS policy” (Nkondo, Hart & Nassimbeni 2018:vii). In the preamble to the final draft of the National Policy for Library and Information Services in South Africa (Nkondo, Hart & Nassimbeni 2018) it is stated: “The parties to the Policy ... are ... [c]onvinced that a national policy to promote and develop the Library and Information Services Sector will make a significant contribution to the development of a responsive, responsible, and deliberative informed and reading nation” (Nkondo, Hart & Nassimbeni 2018:ii). Part of the LIS sector is school libraries and the foundation of a “reading nation” should be formed in schools. This can only happen if functional school libraries exist.

There are still important issues regarding the staffing and funding of school libraries, which without the implementation of a legislated school library policy will remain a stumbling block (Mojapelo & Dube 2017:220). Although a legislated school library policy does not equate to functional, efficient school libraries, “its inherent value cannot be over emphasised” (Mojapelo & Dube 2014b:3).

## 1.2 Statement of the problem

We are living in the 21st century

... in a world that is inundated with written language, or 'print'. We see it in our newspapers, on our contracts, on the screens of our cell phones and the pages of our school books. From the policies of government to the signs on our roads, it is the essential ingredient in modern life. Print is everywhere. And this is why reading is so important (Spaull 2017a).

Success in school depends on learning to read for meaning. In 2008, the Department of Education published a National Reading Strategy with the following vision: "Every South African learner will be a fluent reader who reads to learn and reads for enjoyment and enrichment" (Department of Education 2008). However, learners' reading ability is a challenge for education in South Africa. Adding to this challenge is the absence of functional libraries in schools. A functional school library can be defined as well-stocked, have qualified school librarians to manage the collection and effective programmes to develop information literacy (AASL 2018, Barrett 2010:136, Kachel 2013:4, Nkondo et al 2014:48, Shenton 2014:141-142).

The following statistics reflect the poor state of libraries in South African schools: Of the 25 720 public and independent schools (Department of Basic Education 2013:1) only 7% (1855) have potentially functional school libraries. Concomitant with this is the absence of an official library policy, although there are numerous draft policies and several writers have stressed the need to implement an official national library policy (Le Roux 2002:121; De Vries 2009:159; Paton-Ash 2012:47; Hart & Nassimbeni 2013:16; Mojapelo & Dube 2014b:4–5; Mojapelo 2015:47–48).

Concern about poor reading skills has been accentuated by the results of the latest 2016 PIRLS study, which indicate that there was no improvement in Grade 4 and 5 learners' reading scores between 2011 and 2016 (Spaull 2017b).

Therefore, the problem identified for this research is to establish whether the lack of access to functional school libraries is a contributing factor to the reading inadequacy and low reading achievement of primary school learners in South Africa, and whether this is further exacerbated by the non-implementation of official school library policies.

### **1.3 Purpose and objectives of the study**

The purpose of this study was to explore the influence of school libraries on reading attitudes among primary school learners in South Africa, and investigate the reasons for the lack of implementation of school library policies.

Accordingly, the research objectives include to

- identify primary school learners' self-reported reading attitudes
- identify the role of the school principal in learners' reading readiness
- report on teachers' use of various reading materials during reading instruction and/or activities
- report on the influence of school libraries in instilling a reading culture
- direct attention towards the reasons for the lack of non-implementation of school library policies

### **1.4 Research questions**

The research question addressed in this study is the following:

Does the availability of school libraries and school library policies have an influence on primary school learners' reading attitudes and reading achievement?

The sub-problems that can be identified from the research question are as follows:

- What are the self-reported reading attitudes of South African Grade 5 learners who participated in the PIRLS 2011 study?
- What is the influence of school libraries on the reading attitudes of learners?
- What are the reasons for the absences of and non-implementation of school library policies?

The primary focus of this study is to investigate whether the availability of school libraries and school library policies has an influence on the reading attitudes and reading achievement of primary school learners.

## **1.5 Significance of the study**

This study is grounded in the belief that since school libraries play an important role in reading achievement, the development of a positive attitude to reading and access to functional school libraries will assist in promoting the reading achievement of primary school learners.

This research attempts to add to the literature by investigating the self-reported reading attitudes towards reading and the reading proficiency of Grade 5 learners in schools that took part in the PIRLS 2011 study. It is important for policymakers to be aware of the non-implementation of school library policies and thus policymakers and school governing bodies may benefit from the findings of the study which will give insight into the utility of functional school libraries.



In addition, the findings of this study may assist decision makers to make informed decisions relating to the implementation of school library policies and the establishment of functional school libraries in primary schools in South Africa.

## **1.6 Delimitation and scope of the study**

The current study focused firstly on a systematic literature review of articles/studies on South African school library policies, which were published between 1994 and 2017. The study also analysed the self-reported reading attitudes of grade five learners from Afrikaans and English medium schools. Data were collected in 2011 by the International Association for the Evaluation of Educational Achievement (IEA) for the PIRLS 2011 study which were published in 2012. This may be seen as a limitation to the study, as the results of the latest 2016 PIRLS study appeared in December 2017, by which time the data analysis for this study had already been completed.

## **1.7 Structure of the thesis**

This study consists of five chapters.

Chapter 1 provides an introduction and background to the study, the statement of the problem and the purpose of the research.

Chapter 2 presents the literature review of the study.

Chapter 3 discusses the research design and the research methods used in this study.

Chapter 4 presents the data findings and analysis.

Chapter 5 provides a summary of the research findings, conclusions and recommendations.

## 1.8 Summary

The lack of functional school libraries and the absence of an approved school library policy make research like this necessary in order to identify ways to improve the situation. The intention of this study is to identify the self-reported reading attitudes of learners who took part in the Progress in International Reading Literacy Study (PIRLS) 2011 study and to investigate, by means of a systematic literature review of material published from 1994 to 2017, the non-implementation of school library policies.

In the next chapter a literature review is presented of studies relating to reading and reading achievement and the role of school libraries. In addition, factors that have an influence on the reading culture in schools such as classroom libraries, reading activities and access to books will be discussed. A brief overview of secondary data analysis and the PIRLS 2011 study will also be presented.

# **Chapter 2**

## **Literature Review**

### **2.1 Types of literature reviews**

The purpose of a literature review is to give an exhaustive appraisal of prior research on a specific topic. Hence, a literature review generally gives an overview of the current state of research on a particular topic by key authors in the field, discusses prevailing theories and hypotheses, highlights issues and identifies areas that require further research (Birmingham City University Centre for Academic Success 2011). There are various types of literature reviews, for example the traditional or narrative review, historical reviews, methodological reviews and systematic reviews. For this study, a narrative literature review and a systematic literature review were conducted.

#### **2.1.1 Narrative literature review**

A narrative literature review critiques, evaluates, compares and summarises a relevant body of research studies that addresses the subject area (Cronin, Ryan & Coughlan 2008:38). Such a review is valuable for bringing together the literature in a specific subject area. Its primary purpose is to provide the readership with a comprehensive overview of the literature in the field in order to understand the existing body of knowledge and highlight the significance of new research (Cronin et al 2008:38; Mathipa 2015:69).

#### **2.1.2 Systematic literature review**

Systematic literature reviews originated in the health sciences to support evidence-based medicine (Kitchenham 2007:1). Such reviews can be defined as “a means of evaluating

and interpreting all available research relevant to a particular research question, topic area, or phenomenon of interest” (Kitchenham 2007:3). The aim of systematic reviews is to present a “fair evaluation of a research topic by using a trustworthy, rigorous, and auditable methodology” (Kitchenham 2007:3). A further consideration of this type of review is whether there should be a time frame, as well as a description of the methods used to evaluate and synthesise the findings, so that the reader can assess the reliability and validity of the review (Cronin et al 2008:39). The methodology applied to conduct the systematic literature review for this study forms part of chapter 3 and the results are discussed in chapter 4.

## **2.2 Introduction to the narrative literature review**

Onwuegbuzie and Frels (2012:29) define a literature review as “an interpretation of a selection of relevant published and/or unpublished information that is available on a specific topic” and state that it involves “summarisation, analysis, evaluation and synthesis”, which is presented in a coherent narrative. This section thus provides a comprehensive approach to discovering the literature that discusses the influence of school libraries and how their availability affects attitudes to reading among primary school learners in South Africa.

The literature review firstly describes attitudes towards reading, as well as reading achievement and the importance of. It then contextualises the reading and school library landscape in primary schools, focusing on the lack of functional school libraries. Factors that have an influence on the reading culture in schools such as classroom libraries, reading activities and access to books are then discussed. This is followed by a discussion on the reading attitudes and reading achievement of primary school learners based on a secondary analysis of data obtained from the Progress in International Reading Literacy Study (PIRLS 2011) for South Africa. The literature review concludes with a brief overview of the PIRLS 2011 study.

## **2.3 Attitudes towards reading**

Attitude towards reading is defined by Guthrie and Knowles (2001:161) as “a system of feelings related to reading, which causes the learner to approach or avoid a reading situation”. These authors further state that reading attitudes are “affective responses that accompany behaviour of reading initiated by a motivational state”.

Fitzgibbons (2004:22) defines reading attitude as the “feelings students have about reading”. Fitzgibbons further states that positive feelings towards reading are imperative if the learner is to read effectively. It is important to understand the role that attitude plays in developing readers as this may affect learners' level of ability, and a poor attitude in a fluent reader may result in the learner choosing not to read (McKenna, Kear & Ellsworth 1995:934). In the PIRLS 2006 study, it was established that learners with a positive attitude to reading had greater success with reading (Mullis et al 2007), and this was also evident in the 2011 PIRLS study. In a meta-analysis of thirty-two studies, Petscher (2010:338) found that learners' attitudes towards reading and reading achievement were especially influential on the reading behaviour of primary school learners.

## **2.4 Reading achievement**

The ability to read is essential to an individual's intellectual development and personal growth (Mullis, Martin, Kennedy, Trong & Sainsbury 2009:1). “Knowledge about how well students can read, together with information about which policy-related factors are implicated in understanding reading achievement, can provide policy makers and researchers in every country with insights into how to improve literacy and reading achievement” (Mullis et al 2009:1). Reading achievement can only be measured if a learner can read. Spaul (2016a:1) states in this regard:

Reading for meaning and pleasure is arguably the most important skill children learn in primary school. Since almost all future learning will depend on this fundamental understanding of the relation between print and spoken language, it is unsurprising that literacy, built upon a firm foundation of basic reading, is used as one of the primary measures of school efficacy.

Evidence from three national and international surveys that tested reading achievement, namely, PIRLS 2011, Southern and Eastern African Consortium for the Monitoring of Educational Quality (SACMEQ II) and the Annual National Assessments (ANA), shows that primary school learners in South Africa lag behind the benchmarks for reading literacy and achievement (Van der Berg 2015:2).

PIRLS 2011 provided a comprehensive picture of the reading achievement of Grade 4 and 5 learners in the countries that participated in the survey and in which South African learners performed poorly. In addition, in the third survey conducted by the Southern and Eastern African Consortium for the Monitoring of Educational Quality (SACMEQ 2017), an international non-profit organisation comprising Southern and East African ministries of education, South African learners came tenth out of fifteen SACMEQ countries for reading performance (Spaull 2011:24). In South Africa, the Annual National Assessments (ANA) were launched in 2011 with the goal of measuring the literacy and numeracy skills of learners in Grades 1 to 9. According to Tshabalala (2015), the purpose was to “diagnose areas of weakness and provide the Department of Basic Education (DBE) and teachers with insights that can be used to craft remedial interventions”. However, teachers, parents and education unions are currently contesting these assessments (Taylor 2015; Spaull 2016b). In addition, Spaull (2014) identifies a serious problem in this regard, indicating that the results are not comparable across years as claimed by the Department of Basic Education (DBE). Teacher unions thus concur that the ANAs are not achieving their intended purpose. Taylor (as quoted in Tshabalala 2015) suggests that an

independent agency should be contracted to run the tests in order to promote the integrity and independence of the ANAs.

In 2016, the Minister of Basic Education, Ms Angie Motshekga, announced that the “controversial Annual National Assessments (ANA) are on their way out and will be replaced by the National Integrated Assessment Framework (NAIF)” (Gerber 2017; DBE 2016:6). It is therefore apparent from the evidence provided by the surveys that the reading achievement of primary school learners in South Africa lags behind international benchmarks.

## **2.5 Importance of school libraries**

Several authors confirm that school libraries are important and have an influence on the development of children’s reading (Lonsdale 2003; International Federation of Library Associations 2006; *School Libraries Work!* 2008; Kachel 2013). Neuman and Celano (2012) state that functional resource-rich school libraries play a key role in the promotion of reading. In a study on how effective school libraries in Ohio are in helping learners, Todd and Kuhlthau (2005:80) found that an effective school library assists with reading. In addition, Busayo (2011) acknowledges that school libraries are of the utmost importance in all areas that relate to learners’ academic performance and reading.

Furthermore, Alman (2017) maintains that the “significant role [of school libraries] includes addressing marginalization and meeting the needs of underserved groups, disrupting the divide between the technology-haves and the technology-have-nots, and ensuring access for all, regardless of circumstances” (Alman 2017:163).

Todd (2017:158) laments the fact that “in recent years we have witnessed considerable scepticism around the role, value, and sustainability of libraries – school, public, and academic”. Todd (2017:161) furthermore emphasises that school libraries “must play a

significant role in balancing the effects of poverty [and] socioeconomic disparity”. This author (Todd 2017:161) further emphasises the importance of certain key concepts in discourses on the future of school libraries: “school libraries must play a significant role in balancing the effects of poverty, socioeconomic disparity, and work concertedly in the future for diversity, inclusiveness, human rights, and social justice”.

A study of school libraries conducted in twenty-three states in the United States established that school libraries have an impact on student achievement (Kachel 2013). According to the IFLA/UNESCO School Library Manifesto (International Federation of Library Associations 2006), it is important to create effective school libraries in today’s information and knowledge-based society to sustain children in their habit to become lifelong readers and learners. One organisation, the Partnership for 21st Century Skills, has developed a knowledge base and skill set that learners should possess in order to survive in the 21st century. The framework suggests that essential skills and competencies for learners include critical thinking, problem solving, communication and collaboration (Partnership for 21st Century Skills 2015). Students must also master core subjects which include reading, arts, mathematics, and so forth (Partnership for 21st Century Skills 2015).

The American Association of School Librarians (AASL) has developed standards for the 21st-century learner. Two of the standards mentioned for the development of learning skills are the importance of reading and school libraries (American Association of School Librarians 2007). These are endorsed by Machet and Tiemensma (2009:59), who suggest that an essential skill to master is the ability to read. Research studies on school libraries in South Africa are analysed in the systematic literature review in chapter 4.



## **2.6 Contextualising the reading environment of primary schools in South Africa**

South Africa is often described as the most unequal society in the world. According to Borat (2015), there are many factors that explain why inequality is so pronounced in South Africa. For example, some of the key factors include variations in the availability of assets that households have post-1994 “in the form of, for example, human capital, access to financial capital, and ownership patterns” (Bhorat 2015). This causes a “highly unequal growth trajectory” (Bhorat 2015).

South Africa’s first democratic elections in 1994 paved the way for a new democratic dispensation. With the transformation of the educational system and “new educational legislation and a new curriculum” there was a “fresh optimism to South African school library circles” (Hart & Zinn 2007:89). In the 1994 interim curriculum for basic education, an Information Skills Learning Programme was included and information skills programmes were designed by school librarians for the envisaged new curriculum (Hart & Zinn 2007:89). Unfortunately, this “fresh optimism” did not translate into action, and many challenges remain for schooling in South Africa. The challenges identified by Hart and Zinn (2007:90) include the size of the school-going population; rural poverty; the apartheid legacy of school funding; continuing high rates of failure and dropout; backlogs in the provision of basic facilities; the redress of historical disparities in teacher/pupil ratios and teachers’ poor qualifications and poor subject knowledge. A further problem was that teacher-librarian posts were abolished in schools after 1994, and that “school libraries did not feature on the educational agenda for a variety of reasons [such as] unrealistic expectations of the role of ICTs, lack of understanding of the role of libraries, and many other urgent demands on Government funds” (Department of Arts and Culture 2015:20). Moreover, the South African Schools Act, which was passed in 1996, makes no mention

of school libraries (Hart & Zinn 2007:92). Paton-Ash and Wilmot (2013:129–133) have drawn up a chronological list of various issues associated with school libraries from pre-1994 to 2007. These issues include the status of school libraries in South Africa; the impact of apartheid on school libraries; the link between literacy and school libraries; governance; the broadening awareness of the state of public school libraries, and advocacy (evident from the growing grassroots/popular support for public school libraries).

Paton-Ash and Wilmot (2013:155) state that “without effective governance school libraries will not play the meaningful role that they should in achieving quality education”. In South Africa, the DBE is responsible for developing policies for school libraries, while the nine provincial education departments are responsible for implementing the policies (Machet & Tiemensma 2009:65). Mojapelo and Dube (2014b:4–5) drafted a chronological outline of school library legal and policy frameworks, starting with the Constitution of the Republic of South Africa and ending with the National Guidelines for School Library and Information Services in 2012. These authors point out that there have been several “draft” discussion documents, but these have not been finalised or implemented (Mojapelo & Dube 2014b:5).

A major impediment to functional school libraries is the non-existence of national policy and the resulting lack of implementation of the existing provincial school library policies.

The urgent priority for a national policy for school libraries received momentum during a second phase of negotiations between stakeholders during 2013 to 2014 (Hart & Nassimbeni 2016:208). According to Hart and Nassimbeni (2016:208) “It seemed that the highly visible civic action by the nongovernmental organization (NGO) Equal Education, in its campaign for school libraries from 2009, including a series of marches by thousands of school children” pressured the government to address the dire school library situation. In 2014 the NCILS published the *LIS Transformation Charter* (Nkondo et

al 2014). This led to the draft National Policy for LIS in 2018 and it includes several pages on school libraries. The draft policy was approved by the NCLIS in March 2018.

### **2.6.1 Lack of functional school libraries**

The lack of functional school libraries in South Africa, especially in primary schools, seriously impedes learners' reading achievement (Equal Education 2010; Howie et al 2012; Paton-Ash & Wilmot 2013).

A National Education Infrastructure Management System (NEIMS) report of 2016 states that only 17% (3318) of public schools in South Africa have a functional school library (DBE 2016:5). In regulations for minimum uniform norms and standards for infrastructure, published in the *Government Gazette* of 29 November 2013 (South Africa 2013), it was specified that provincial education departments had to ensure that by 2023, all schools had libraries as well as science and computer laboratories. It is highly unlikely that this target will be met as reports "compiled by provincial education departments, which outline the progress made towards meeting the minimum norms for public school infrastructure, paint a very bleak picture" (Govender 2018).

The PIRLS 2011 also confirmed that South Africa is one of the countries with the lowest number of school libraries (Howie et al 2012:xviii). Howie et al (2012:xviii) further state by that "shortages of reading resources and lack of infrastructure such as school libraries, and poor working conditions, are strongly associated with poor achievement".

### **2.6.2 Reading culture in primary schools**

The reading culture in primary schools is influenced by many factors. Learners' schools and homes are situated within a wider community environment with differing resources, goals and organisational attributes. These community aspects will influence a learner's

home and school environment and with it the learner's reading attitude and reading achievement. Research evidence links poverty to weak reading performance (Pretorius & Mampuru 2007; Currin & Pretorius 2010; Pretorius 2014). Research in high-poverty schools in townships in South Africa revealed that learners are seldom exposed to books (Pretorius 2014:55). For this reason, the PIRLS 2011 study looked at the community, home and school environment. For this literature review the focus is on the school environment.

### **2.6.3 Factors that influence reading attitude and reading achievement in primary schools**

The reading attitude and reading achievement of primary school learners is influenced by various factors. In schools, some of these factors include access to books, classroom libraries and classroom reading activities, which will be discussed in the following sections.

#### **2.6.3.1 Access to books**

Given the importance of the ability to read, learners must have access to books in schools. Notwithstanding the importance of reading, nearly one-third of 650 million primary school learners worldwide “do not master basic literacy and numeracy” (UNICEF 2016:46). In South Africa illiteracy portrays a desperate picture. Fourth graders perform far below the basic reading level (Howie et al 2012:xvi), with a lack of access to books being an important contributor. The LIS Transformation Charter (Nkondo et al 2014:47-53) gave an evidence-based overview of the disparities and lack of information sources in school libraries in South Africa. According to Krashen (2013:21), access to books will lead to voluntary reading thus increasing the development of literacy. Krashen (2013:21) further states that access to the books provided by school libraries “has a positive impact on reading development”.

Reading achievement is one of the priorities of academic achievement. One of the predictors of a low academic achievement is specifically a lack of resources. Students from schools with resource-rich libraries were found to be more motivated to read, to read more often and were better readers than students from schools without a resource-rich library (Nielen 2016). Krashen (2011) advances the notion that access to interesting reading materials is a key tool to stimulate reading in schools. In addition, access to reading materials will stimulate voluntary, independent reading and increase reading achievement. As part of an overview of research literature on the value and impact of independent reading on school achievement, Cullinan (2000:7) observed that “collectively, research supports the fact that during primary and elementary grades, even a small amount of independent reading helps increase students’ reading comprehension, vocabulary growth, spelling facility, understanding of grammar, and knowledge of the world”. It is therefore expected that schools with a functioning school library, where learners have access to a variety of reading material, will have a positive influence on reading achievement.

### **2.6.3.2 Classroom libraries**

An important feature of providing a literacy-rich environment in a classroom is to give learners opportunities to engage with texts on a range of topics and genres. A significant component for enhancing learners’ literacy skills and motivating them to read is to have an up-to-date collection of books in the classroom (Neuman 2001:12). Literacy engagement is perceived by Cummins (2011:145) as a primary determinant of literacy achievement and sustained growth in reading comprehension. Well-stocked classroom libraries can enhance literacy engagement and, as is further acknowledged by Allington and Cunningham (as cited in Zimmerman & Howie 2016:34), ready access to ample amounts of easy reading materials in a classroom library is an essential factor in enhancing literacy, developing reading strategies and fostering positive intentions to read.

In a research study on a reading and literacy intervention in a high poverty school in South Africa, Pretorius and Mampuru (2007:44) discuss the importance of providing collections of books in classrooms. In the PIRLS 2011 study, it was found that the achievement of learners with access to a classroom library was higher than those without such access (Howie et al 2011:107). Although “71% of teachers of Grade 5 learners who took part in the PIRLS 2011 survey indicated that their learners have access to a classroom library”, only 29% of those “teachers [who] reported having a classroom library had access to more than 50 books in this library” (Howie et al 2011:107).

### **2.6.3.3 Classroom reading activities**

There are many commercially packaged classroom reading activities to be found on various websites on the internet for teachers to buy and use in the classroom, all emphasising the importance of reading activities to advance reading achievement. In a study about the ability of classroom reading activities to predict later reading achievement, Swanson, Orosco and Kudo (2017:209) found that the inclusion of reading activities related to grammar, spelling, vocabulary and structural analysis in Grade 1 were positively related to learners’ reading skills in Grade 2.

In South Africa, the National Curriculum Statement (CAPS) documents provide teachers with more structured guidelines on the amount of time that should be spent on specific reading activities (Howie et al 2012:16).

In Hong Kong, as reported in the PIRLS 2006 study, a significant factor in the good results achieved by learners is the fact that teachers make use of a wide range of sources and reading activities in classrooms (Lam, Cheung & Lam 2009:28). In South Africa, a positive step to increase classroom reading activities was the *Drop All and Read Campaign*, launched in September 2015 by the Minister of Basic Education, Mrs Angie

Motshekga. This programme expects schools to observe a mandatory 30 minutes of reading every week (Motshekga 2015).

## **2.7 PIRLS 2011**

### **2.7.1 Introduction**

The outcomes of the Progress in International Reading Literacy Study (PIRLS) 2011 show the degree to “which South African grade four learners lag behind in their achievement of the outcomes associated with this international comparative assessment of reading literacy” (Zimmerman & Howie 2016:32). This study is “the third international comparative study focusing on reading comprehension and literacy, as well as home and school contexts, of fourth grade learners run under the auspices of the IEA. It has been conducted every five years since 2001” (Howie et al 2012:1).

### **2.7.2 Purpose and design of the PIRLS 2011 study**

The purpose of the 2011 PIRLS study was mainly “to help improve the teaching of reading and the acquisition of reading skills around the world” (Mullis et al 2009:1). Accordingly, it tested learners’ reading literacy with respect to the purpose of reading, the process of comprehension and their reading behaviours and attitudes (Mullis et al 2009:13). Background questionnaires intended to collect information about learners’ home, school and classroom contexts were also distributed and completed. The fourth year of schooling was selected because at this stage learners should have learnt how to read and are now reading to learn (Mullis et al 2009:8). In 2011, a new assessment called prePIRLS was initiated to allow learners from lower achieving countries to participate at a different level. In 2011, representative samples of students in forty-nine countries participated in PIRLS

and prePIRLS (Mullis, Martin, Foy & Drucker 2012:5). Of these, fourth grade learners were assessed by PIRLS in forty-five countries, while three countries participated in the prePIRLS, “a less difficult version of PIRLS inaugurated in 2011 to be a stepping stone to PIRLS” (Mullis et al 2012:5).

Of the forty-five countries which participated, the four top-performing countries were Hong Kong SAR, Russian Federation, Finland and Singapore. Other countries that performed well were the United States, Denmark, Ireland and England. Only twelve of the forty-five countries that participated performed below average, of these South Africa was one.

### **2.7.3 The participation of South Africa**

Over the past two decades South Africa has increasingly taken part in international surveys. For example, in 1995, 1999, 2002 and 2011, South Africa took part in the TIMSS (Trends in International Maths and Science Study) and in 2006 and 2011 in the PIRLS (Progress in International Reading Literacy Study). In South Africa, the PIRLS 2011 study was coordinated by the Centre for Evaluation and Assessment (CEA) at the University of Pretoria (Howie et al 2012:6).

In South Africa, the

... main study, comprising 341 schools for prePIRLS, 92 schools for PIRLS, and 19 259 learners (15 744 for prePIRLS and 3515 for PIRLS) in total was conducted in October and November 2011. The testing of the learners took place in all eleven official languages at fourth grade level, and in Afrikaans and English at fifth grade level only. Contextual questionnaires were completed by learners, parents, teachers and principals. The data was captured, cleaned and submitted to the International Data Processing Centre in Hamburg, Germany in early 2012 (Howie et al 2012:6–7).



In the 2011 PIRLS study, children in Grades 4 and 5 in South Africa achieved the lowest scores in the reading comprehension tests (Mullis et al 2007; Howie et al 2012). The learners performed nearly “80 points below the international average score of 500” (Howie et al 2012: xvi). Accordingly, the achievement levels of South African Grade 4 learners were similar to learners in Saudi Arabia, Indonesia, Qatar and Botswana (Howie et al 2012: xvi).

Howie et al (2012:xvii) further note that effective reading is hampered in under-resourced schools:

More than half of the learners in the Grade 4 sample came from schools with no school libraries and [the learners from] these schools achieved on average 155 points less than schools with well-resourced libraries. One in five learners attended a school where the inadequacy of the resources was reported to be hampering teaching and learning.

## **2.8 Summary**

The focus of this chapter was a literature study which was aimed at presenting a review of the studies relating to attitudes to reading, reading achievement, the importance of the school library and research studies that have been conducted on school libraries. The reading and school library landscape in primary schools was contextualised, focusing on the lack of functional school libraries. Factors that have an influence on the reading culture in schools such as classroom libraries, reading activities and access to books were also discussed. Since the reading attitude and reading achievement of primary school learners is based on a secondary analysis of data pertaining to the PIRLS 2011 for South Africa, the final part of the literature review provided a brief overview of the PIRLS 2011 study in particular.

# **Chapter 3**

## **Research Design and Methods**

### **3.1 Introduction**

Concerns about the poor reading achievement of primary school learners in South Africa are well documented. As the literature survey conducted in the previous chapter indicates, learners' attitudes to reading are influenced by various factors, with access to books playing an important role. It was further established from the literature that there is a lack of functional school libraries in South Africa. Moreover, while policies on the establishment of school libraries do exist, a lack of implementation is evident. In an attempt to answer the research questions, the research design included a secondary analysis of data from the PIRLS 2011 study on reading attitude and reading achievement among primary school learners in schools with and without libraries. It also included a systematic review of the literature provided by research articles, reports and theoretical works on what has transpired in the school library landscape and applicable policies in South Africa since 1994. Consequently, this chapter provides a description of the secondary data analysis method applied, as well as a systematic literature review.

### **3.2 Research design**

This study employed a secondary data analysis as well as a systematic literature review. The secondary data analysis covered reading attitude and reading achievement data taken from the PIRLS 2011 study relating to South African primary schools only. This data analysis followed an integrated qualitative-quantitative approach. Accordingly, qualitative data were transformed into quantitative data which were analysed statistically. This integrated qualitative-quantitative approach ensured a holistic, in-depth analysis of the

data. The focus of the systematic literature review, on the other hand, was on research articles and theoretical works pertaining to what has transpired in the school library landscape and with regard to applicable policies. The literature reviewed was sourced from South African journals and theoretical works published between 1994 and 2017.

### **3.3 Secondary data analysis study**

Publicly available data taken from published studies were used for the secondary data analysis. This type of data analysis is applied to gain new insights into a research topic. This section starts with a discussion on the advantages and disadvantages of secondary data analysis. The purpose and design of the PIRLS 2011 study is discussed in section 2.9.2 of chapter 2 of this study. Accordingly, this study re-used the data taken from the PIRLS 2011 study on reading attitude and achievement among Grade 5 learners in South Africa.

There are two main approaches to secondary data analysis, which is “an alternative to undertaking primary empirical research, or as one element in a research strategy” (Burton 2000:348). Heaton (2004:14) defines secondary data analysis as “a research strategy which makes use of pre-existing quantitative data or pre-existing qualitative research data for the purposes of investigating new questions or verifying previous studies”. When conducting a secondary analysis, data from an existing, publicly available dataset are used. Miller and Brewer (2003:285) explain that “secondary data analysis involves the analysis of an existing dataset, which had previously been collected by another researcher, usually for a different research question”. According to Mouton (2001:164), existing data can be reanalysed, thereby testing hypotheses or validating models.

Secondary data analysis can be used to investigate new or additional research questions (Heaton 2008:35).

### **3.3.1 Advantages of secondary data analysis**

The use of data collected for a different research purpose does have its advantages. Some of these include the saving of time and money as the data are already available. The data sets are usually of a high quality and contain a wealth of information. Hinde (as cited in Miller & Brewer 2003:286) also notes that secondary analysis creates new knowledge because it “builds upon previous work”. Software to assist in data organisation, coding and analysis is often included in secondary datasets (Vartanian 2010).

### **3.3.2 Disadvantages of secondary data analysis**

Although secondary data present many opportunities, there are also disadvantages to consider. For example, the “lack of control over the framing and wording of survey items” is a problem (Vartanian 2010). Another potential problem that may be encountered when using secondary data is the fact that data collection errors cannot be controlled (Mouton 2001:165). It is also not possible to locate additional or follow-up information from survey participants (Vartanian 2010).

### **3.3.3 The South African PIRLS 2011 sample**

Fifty-seven education systems from around the world participated in the PIRLS 2011 study (Thompson et al 2012:1). Education systems may represent a portion of a country, nation, kingdom, or emirate or other non-national entities, and countries are considered to be complete independent national entities (Thompson et al 2012:1). Accordingly, nationally representative samples of approximately 4000 learners from 150 to 200

schools in 49 countries participated in the PIRLS and prePIRLS, resulting in a total participation of 325 000 learners (Mullis et al 2012:5, 28).

In South Africa, 341 schools (15 744 learners) participated in the prePIRLS and 92 schools (3515 learners) in the PIRLS (Howie et al 2012:23). Data used are based on data extracted from the PIRLS 2011 International Database. This database is available at <http://timssandpirls.bc.edu/pirls2011/international-database.html> “The Database contains the PIRLS and prePIRLS 2011 student achievement data files and student, home, teacher and school background questionnaire data files, along with support materials” (Foy & Drucker 2011:2).

The South African PIRLS 2011 data set was retrieved from the International Association for the Evaluation of Educational Achievement data repository. The data options include which study to select, the year of the study, the type of file, the country, and the type of format in which the data can be retrieved.

The PIRLS 2011 data set consists of the forty-nine countries that participated in the PIRLS 2011 study (Mullis et al 2012:26). The database consists of “student achievement data as well as student, parent, teacher, school and curricular background data for the forty-nine countries and nine benchmarking entities that participated. The student, parent, teacher, and school data files are in SAS and SPSS formats with programs and macros” (PIRLS 2011). “The database includes data from 334 446 students, 281 078 parents, 15 517 teachers, 11 449 school principals, and the National Research Coordinators of each country. All participating countries gave the IEA permission to release their national data” (Foy & Drucker 2011:1).

### **3.3.4 Population of the study**

The population of the PIRLS 2011 study is defined as “the grade that represents four years of schooling, counting from the first year of ISCED Level 1” (Mullis et al 2009:60). The abbreviation ISCED stands for the International Standard Classification of Education, while ISCED Level 1 refers to the first stage of primary education (Mullis et al 2009:60). In South Africa this level comprises Grade 4 learners. In 2011, Grade 4 learners were selected for the prePIRLS while the PIRLS 2011 sample “was selected from all the schools that had instruction in English and/or Afrikaans up to Grade 5” (Howie et al 2012: 22). The prePIRLS was introduced as a bridge to PIRLS at Grade 4 as a less difficult assessment, intended to measure the reading comprehension skills of learners who are still in the process of learning how to read.

For this study, statistics on the Grade 5 learners from South Africa in Afrikaans and English medium schools who participated in the PIRLS 2011 study were used (Howie et al 2012: 6).

### **3.3.5 Data collection methods applied by PIRLS 2011 (South Africa)**

The collection of qualitative data on South African participants in the PIRLS 2011 took place during October and November 2011. The study was conducted by a market research company appointed by the Centre for Evaluation and Assessment. According to Howie, fieldworkers were trained in order to ensure compliance with the guidelines supplied by the IEA (Howie et al 2012:47). Data collection “took the form of a one-day testing and learners completed the reading achievement tests in two sessions of 40 minutes, followed by the completion of the learner questionnaire” (Howie et al 2012:47). The school and teacher questionnaires were completed on the same day and the parent

questionnaires were handed out to learners with the request to return the completed questionnaire the following day (Howie et al 2012: 47).

The data were captured by means of WinDEM, a program designed by the IEA and made available to all participants for capturing and verifying the data (Howie et al 2012:26). The final report was released in 2012.

### **3.3.6 Data gathering instruments**

The data gathering instrument comprised five reading scales: an overall reading literacy scale, two scales that involve the “purposes of reading, namely literary experience and the acquisition and use of information” and two scales for measuring reading comprehension processes (Howie et al 2012: 23).

Extensive questionnaires which sought to elicit background information were used to collect data related to the reading behaviour and reading attitudes of learners, parents, teachers and school principals. In the learner questionnaire, aspects relating to reading behaviour and attitudes were addressed. The aim of these questionnaires was to collect information on “learners’ home and school experiences in connection with learning to read” (Howie et al 2012: 24).

The parent questionnaires attempted to ascertain the learners’ home environment and parents’ behaviour and attitudes towards reading and that of their children being assessed. Questionnaires given to teachers and school principals were aimed at gathering information about the learners’ school and classroom contexts, in particular about the teaching and learning related to reading and language (Howie et al 2012: 24).

### **3.3.7 Statistical analysis**

The data retrieved from the IEA online repository were analysed using the Wilcoxon signed-ranked test (Field 2013:228), which is available in the Statistical Package for the Social Sciences (SPSS) software.

### **3.3.8 Trustworthiness**

If the aim of qualitative analysis is to be achieved, the use of trustworthy data is required. To ensure the trustworthiness of qualitative data, Wagner, Kawulich and Garner (2012:243) explain that four criteria should be met, namely, credibility, transferability, dependability and confirmability.

Credibility is the term used to refer to activities that ensure the findings derived from the data are to be believed (Wagner et al 2012:243). Transferability is the term that is used when findings are used as “the basis for making similarity judgements” (Wagner et al 2012:243). Overall transferability amounts to the generalizability of results by which it can be applied in other situations (Merriam 2009:223). Dependability, meanwhile, is a reliability measure that refers to both the stability and the confirmability of the findings (Wagner et al 2012:243). Finally, the confirmability of research ensures that findings are grounded in the data and not invented by the researcher (Wagner et al 2012:243).

The PIRLS 2011 survey was conducted under the auspices of the IEA. The IEA has been conducting assessments since 1958 and is committed to ensuring that comparative research projects and large-scale assessments in education enhance teaching and learning worldwide (IEA 2018). Currently, “more than 60 countries are actively involved in the IEA network” (IEA 2018). It is therefore assumed that the data relating to the PIRLS 2011 study are trustworthy.



### **3.3.9 Ethical considerations**

For the purposes of this study the research ethics requirements of the University of South Africa were adhered to. Permission to make use of the data was also obtained from the National Research Coordinator (NRC) of PIRLS 2011 for South Africa (see Appendix B for a copy of the letter). The NRC coordinator for PIRLS 2011 was the Centre for Evaluation and Assessment at the University of Pretoria Faculty of Education. The data for this secondary data analysis study were anonymous since the research participants could not be identified. Finally, in the ethical process it was incumbent on the researcher to use the PIRLS 2011 data in a responsible way.

As with all studies undertaken by the IEA, PIRLS 2011 follows the international code of ethics as well as the national code of ethics as required by each participating country (Martin & Mullis 2017).

## **3.4 Methodology for the systematic literature review**

### **3.4.1 Introduction**

A systematic literature review was conducted of research articles, reports and theoretical works on what has transpired in the school library landscape in South Africa since 1994, that is, since the inception of the new democratic dispensation.

## 3.4.2 Search processes

To render the systematic literature review as all-encompassing as possible, various search strategies were used to identify studies published in academic databases, as well other online data sources and reference lists of articles on the topic.

### 3.4.2.1 Academic databases

To capture as many relevant citations as possible, a wide range of databases in the social sciences, library and information sciences, and education were searched to identify studies. Table 3.1 provides a list of all the databases consulted:

**Table 3.1** List of databases consulted

<b>Database</b>	<b>Interface/provider</b>
SA ePublications	Sabinet
SACat (via Sabinet Reference)	Sabinet
Index to South African Periodicals (ISAP)	Sabinet
Kovsidex	Sabinet
SciELO South Africa (Scientific Electronic Library Online South Africa)	Academy of Science of South Africa (ASSAf).
Academic Search Premier	Ebsco
Education Resources Information Center (ERIC)	Ebsco
Library, Information Science and Technology Abstracts (LISTA)	Ebsco
Emeraldinsight	Emerald Group
Unisa library catalogue	Unisa

### **3.4.2.2 Internet sources**

Reports and sources were also searched on various internet websites. In addition, various internet search engines such as Google, Google Scholar and Google Books were searched for information and web pages that might provide references.

### **3.4.2.3 Search strategies**

A cyclical iterative approach was used to identify search terms. The search was built on the concept of school libraries in South Africa. Search terms that were used in combination with the concept of school libraries in South Africa included, but were not limited to, advocacy for school libraries; awareness of the state of school libraries; governance of school libraries; impact of apartheid and school library policies. As the first democratic elections, which marked the end of apartheid in South Africa, took place in 1994 the search was delimited to articles published between 1994 and 2017. In addition, only articles and reports published in English and Afrikaans were considered. The results were then further narrowed down using the following exclusion criteria: studies focusing on special needs learners; studies about libraries in tertiary institutions; and studies about adult basic education (ABET). Search strategies included various combinations of the search terms using Boolean logic.

### **3.4.3 Results of the review**

The findings of this review will be presented and discussed in chapter 4 under the following headings: the identified themes, discussion, implications and recommendations.

### **3.4.4 Summary**

This chapter discussed the methodologies that were used to conduct the study. In this study, a secondary analysis of the data taken from the PIRLS 2011 study on reading attitude and reading achievement among primary school learners in schools with and without libraries was conducted. In addition, a systematic literature review was undertaken of research articles, reports and theoretical works relating to what has happened in the school library landscape and the policies that govern it in South Africa since 1994. The next chapter will focus initially on the systematic literature review. This will be followed by a discussion and interpretation of the results obtained from the secondary analysis, which was conducted on the findings obtained from the questionnaires of the PIRLS 2011 dataset on the reading attitude of learners.

# **Chapter 4**

## **Findings: Analysis of Data and Interpretation of Results**

### **4.1 Introduction**

This chapter commences by discussing the findings of the systematic literature review. (The design of this research method, that is, the systematic literature review of school library policies in South Africa, was described in chapter 3.) This is followed by the presentation and interpretation of the results obtained from the secondary data analysis conducted on the PIRLS 2011 dataset, which pertain to learners' attitudes to reading. This dataset was analysed using descriptive statistics. Accordingly, frequencies and percentages were applied to calculate and present the data in order to highlight relationships and comparisons.

### **4.2 Systematic literature review**

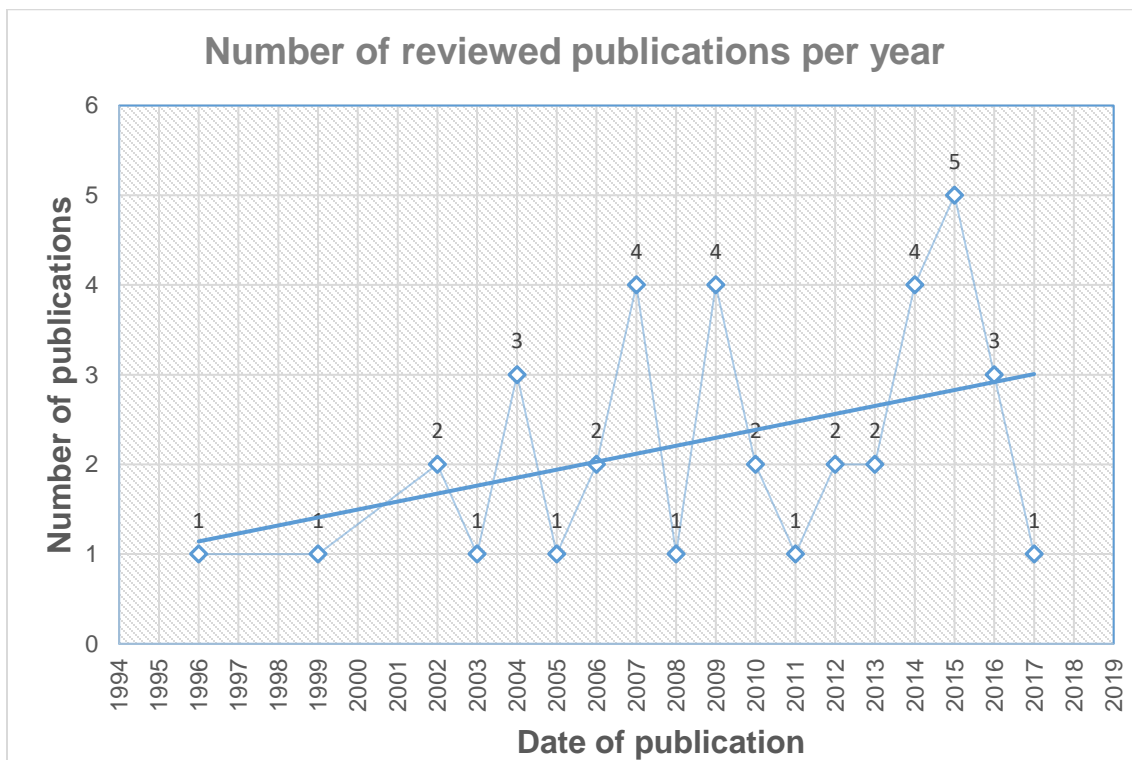
#### **4.2.1 Introduction**

A systematic literature review was conducted to contextualise the research, as well as to identify and analyse articles and reports on school library policies in primary school libraries in South Africa from 1994 to 2017. The date 1994 was chosen because it marked the start of a new democratic dispensation in South Africa (see chapter 3, section 3.4 for a discussion on the research design for the systematic review). The systematic review accordingly identified the following themes: impact of apartheid; advocacy for school

libraries and school library policies. The findings of the review will subsequently be summarised and reported in terms of these themes.

The 40 studies that were identified and reviewed (see Appendix C) were all published between 1996 and 2017. Of these studies, figure 4.1 shows the number of publications published per year. Only the years in which studies on library policy were published are reflected in the figure.

**Figure 4.1** Number of publications published per year on school library policies, 1996–2017



Note: Only the years in which studies on library policy were published are reflected in this figure.

#### **4.2.1.1 Impact of apartheid on school libraries**

Prior to 1994, the South African education system was based on racial segregation as institutionalised by the then National Party government. The year 1994 was a significant turning point for South Africa. It was the year that apartheid was replaced by a new democratic dispensation. After 1994, efforts to redress the inequalities created by apartheid policies started in earnest. In school libraries, the legacy of the apartheid separate education policies is still having an impact, particularly in poor rural areas (Hell 2005:4; Dlamini & Brown 2010; Paton-Ash & Wilmot 2013:136; Hart & Zinn 2015:23; Mojapelo 2015:41; 2016a:6; 2016b:63).

Nassimbeni and Underwood (2007:167) also point out that the consequences of the apartheid state are still evident in a skewed allocation of resources to schools in the rural areas and schools attended by black learners. Jiyane et al (2016:45) contend that the effects of the segregation policies that prevailed in apartheid South Africa are still apparent in the high inequality of the education system and the provision of school libraries in the nine provinces. According to Hoskins (2006:241) and Karlsson (2003:2), the post-apartheid education system inherited a “situation in which eighty percent of all South African schools had no libraries and insufficient learning materials for learners to access the curriculum”. This is exacerbated by the fact that most schools do not have the necessary finances to fund functional libraries (Boekhorst & Britz 2004:69). Hart (2002:4) states that the division between advantaged and disadvantaged schools is “maybe more clear-cut than in the late 1980s” because the governing bodies of middle-class schools have provided funding for functioning school libraries. According to Hart (2002:3–4), we need to be careful not to draw a simplistic distinction between “haves” and “have-nots” because, historically, the coloured and Indian schools had libraries, and schools under the governance of the so-called “black” education departments started to establish school libraries in the 1980s.

#### **4.2.1.2 Advocacy for school libraries**

Equal Education, a movement of learners, parents and teachers that strives for quality and equality in education, plays a big role in advocacy for school libraries. In 2008 Equal Education run workshops on the question why schools should have libraries (Hart 2014:7). “To rebut claims that libraries are unaffordable luxuries” Equal Education commissioned “research in the cost of a national school library system” (Hart 2014:8). In 2010, the organisation published a book with the title *We can't afford not to: costing the provision of school libraries in South African public schools*, as part of a campaign for the establishment of school libraries (Equal Education 2010:1). Hart (2014) has written a comprehensive paper examining positive developments on advocacy for school libraries and in particular the initiatives and campaigns launched by Equal Education. According to Hart (2014:1, 8) the marches, campaigns and court cases by Equal Education put political pressure on government and benefited the LIS Transformation Charter process.

A major advocacy document, the LIS Transformation Charter was presented to the government in 2014. It gave an evidence-based overview of the disparities and lack of information sources in school libraries in South Africa (Nkondo et al 2014:47-53).

Mojapelo (2015:51) proposes that marketing and advocacy for school libraries should be part of a school library policy, while Mojapelo and Dube (2015:115) observe that the teacher-librarian can play an important advocacy role on a school library committee. According to Paton-Ash and Wilmot (2015:7), it is important for teachers to develop an advocacy programme for a school library. Le Roux (2002:121) proposes that the LIS profession should lobby more aggressively for school libraries.

#### **4.2.1.3 School library policies**

A number of the studies have reported on the lack of implementation of school library policies. In 2010, Equal Education (2010:7) stated that, since 2007, the Department of



Education had circulated five drafts of a document on school library policy. Mojapelo and Dube (2014b:4–5), in a chronological outline of the development of the school library legal and policy framework from 1994 to 2012, confirm Equal Education’s observation regarding the five drafts. The authors (Mojapelo & Dube 2014b:5) further point out that this illustrates the need for school library development to be accelerated. The Department of Basic Education published *National Guidelines for School Library and Information Services* in 2012 as response to pressure from the NGO Equal Education (Hart & Nassimbeni 2016:12).

In a research article which formed part of a larger study for her doctorate, Du Toit (2009:1) applied a Delphi technique as a methodology to critically assess the feasibility of implementing the school library policy in KwaZulu-Natal (KZN) province.

Du Toit (2009:3) quotes Knuth, who states that:

Lack of a statutory base creates critical gaps in school library development, variable implementation, a lack of coordination, inadequacies in institutional infrastructure, duplication of effort, and under-use of resources. School library provision that is not supported by official policy becomes vulnerable to financial retrenchment and local educational politics.

Du Toit’s study raises a number of important issues and challenges for the implementation of the provincial policy, while also focusing on issues that need to be resolved if school library development is to be facilitated in South Africa. These include the following:

- the lack of support and the reluctance of the DBE to finalise the policy
- the importance of ICT as a learning tool
- the lack of human, physical and financial resources
- the lack of partnerships and innovative service delivery solutions (Du Toit & Stilwell 2012:130).

This lack of legislated school library policies is noted particularly in developing countries (Mojapelo 2016b:68). A comprehensive review of policy initiatives since the publication

of the National Education Policy Investigation (NEPI) in 1992 can be found in the articles of several authors (Le Roux 2002:112; Paton-Ash 2012:22; Paton-Ash & Wilmot 2013:146–149; Mojapelo & Dube 2014b:4–5; 2015:47–48). The state of school libraries is also discussed by Fombad and Jiyane (2015:191) in relation to the United Nations Millennium Development Goals (MDGs). The eight main MDGs were drawn up by the 189 members of the United Nations (Fombad & Jiyani 2015:195) and include to eradicate extreme poverty and hunger; achieve universal primary education; provide gender equality and empower women; reduce child mortality; improve maternal health; combat HIV/AIDS, malaria and other diseases; ensure environmental sustainability; and develop a global partnership for development (Fombad & Jiyani 2015:195). These goals are “aligned with South Africa’s short- and long-term post-apartheid development plans espoused in the Freedom Charter and embodied in the Constitution” (Fombad & Jiyani 2015:195). In their discussion on the MDGs, Fombad and Jiyane (2015:195) point out that school libraries have an important role to play in realising the progress and achievement of the eight MDGs. In 2016 the MDGs were replaced by the Sustainable Development Goals (SDGs). The seventeen SDGs strive to build on the successes of the MGDs to “end poverty, protect the planet and to ensure that all people enjoy peace and prosperity” (UNDP 2018).

Mojapelo (2015:44) maintains that the purpose of school library policies is to lay the foundation for the development of school libraries. A critique of the fit between the South African Library and Information Science (LIS) policies (which include school library policies) and the development goals of the new emerging democratic South Africa after 1994 is presented by Nassimbeni and Underwood (2007:166). Furthermore, the lack of insight into the role played by school libraries in the “educational and social transformation in South Africa” is identified by Hoskins (2006:247–248) as one of the reasons that the implementation of such policies is lacking. In this regard, Paton-Ash’s (2012:47) study raises the issue that the absence of a national policy “has implications for the capacity of the profession to fill school librarianship posts”. This “capacity” issue is further

exacerbated by the fact that responsibility for funding school librarian posts has been handed over to governing bodies. Moreover, the training of school librarians at tertiary institutions has declined and, in 2002, the DBE closed the School Libraries unit (Paton-Ash 2012:47). This lack of implementation and roll-out of policies is also mentioned by Mchet and Tiemensma (2009:165), while Hart and Nassimbeni (2013:16) postulate that “the stark reality is that the South African school library sub-system is close to extinction. The reluctance of the national education authorities to take a leadership role in reviving it is clear”. They argue that it will take years to address the huge backlogs in school infrastructure and it is therefore necessary to rethink traditional school library configurations to meet the needs of communities (Hart & Nassimbeni 2013:19).

An additional issue of concern is the lack of qualified and motivated staff for school libraries. In a survey on South African school libraries in 1999, it was found that only “20 percent of the staff responsible for the school library was appropriately qualified” (Stilwell 2007:100). The National Policy Framework for School Library Standards of 1997 recommends different models for school libraries that should be taken into account by policymakers (Karlsson 1999:120; 2003:4). Further, this National Policy Framework was revived in 2005 by the then Minister of Education, Naledi Pandor, who publicly stated her conviction that there is a connection between school libraries and improved literacy levels (Zinn 2006:23; Stilwell 2009:1).

Hart (2004:112) suggests that the role of public libraries should not be underestimated, and proposes that a combined school library/community library could be another model to address the shortage of school libraries. Mojapelo and Dube (2015:120) are of the opinion that the establishment of school library committees as governance structures could encourage the finalisation of school library policy.

In 2004, De Vries and Van der Merwe published a comprehensive article on all the school library policy initiatives undertaken in the Northern Cape, listing aspects that should be considered when implementing the proposed school library policies (De Vries & Van der Merwe 2004:129). In his thesis, De Vries (2009:138–156) devotes a chapter to the

national legal framework within which provision should be made for school libraries. He finds that despite all the policies, sufficient attention is not paid to school libraries. De Vries (2009:160–162) also gives a detailed overview of policy documents in the nine provinces of South Africa. According to De Vries (2009:159) it is clear that most documents that have come into being in the provinces are in the form of draft proposals or planning documents. Ultimately, he (De Vries 2009:261) concludes that little progress has been made regarding the provision of libraries in schools in the nine provinces. This view is supported by Mojapelo and Dube (2014a:9), who reported that little has been achieved with the provincial school library policy in Limpopo province.

The developments in KZN, which has formulated its own provincial policy statement on school libraries, have been reported in a number of articles. In KZN, the body responsible for the development of school library systems is the Education Library Information & Technology Services (ELITS) (Hart 2002:7; Du Toit 2009; Dubazana & Hoskins 2011:117–120; Paton-Ash & Wilmot 2013:149). The training of teacher-librarians is proposed as a solution, to establish and manage functional school libraries in KZN province (Evans 2014:119). In the province, the implementation of provincial school library policies has taken place without the support of a national policy. Without legislated policies for school libraries, there remain daunting challenges for the provision of resources.

The lack of library policies therefore remains a stumbling block to the establishment of functional libraries at schools by the post-apartheid government (Mojapelo & Dube 2017:220). Le Roux (2002:121) concludes that the policymaking process has not progressed from the conception to the implementation and evaluation stages. Hart and Zinn (2007:94) on the other hand regard the reluctance of school governing bodies as a stumbling block to the implementation of policies. Olën (1996) points out that about a quarter of employed teachers in South Africa had access to or have experience of using a library, while Karlsson (2003:7) contends that post-apartheid policymakers and senior educational managers “who knew only disadvantaged, under-resourced schools [have]

shaped a perspective that sees school libraries and librarians as unrelated to curriculum access and hence as expendable luxuries". Pretorius and Mampuru (2007:45) and Scheepers (2008:33), whose studies were undertaken at the same high-poverty primary school, observed that none of the teachers at the school was a member of a community library and, of the seventeen members of staff, eleven indicated that they had ten or fewer books in their homes.

#### **4.2.1.4 Summary**

In this systematic literature review, research and theory gleaned from articles and reports on school library policies in primary schools in South Africa from 1994 to 2017 were contextualised. The main themes identified from the 38 studies reviewed were advocacy for school libraries; impact of apartheid; and school library policies. It is clear from the studies that in school libraries, the apartheid legacy of separate education policies is still having an impact, particularly in poor rural areas (Hell 2005:4; Dlamini & Brown 2010; Paton-Ash & Wilmot 2013:136; Hart & Zinn 2015:23; Mojapelo 2015:41; 2016a:6; 2016b:63). In regard to advocacy for school libraries, the initiatives and campaigns launched by the civic group, Equal Education, have played a significant role.

In light of the above discussion, it remains incumbent on the DBE to resolve the issues in relation to the lack of the support for official school library policies. A comprehensive review of policy initiatives undertaken since the NEPI investigation in 1992 are presented by Le Roux (2002:112), Paton-Ash (2012:22), Paton-Ash and Wilmot (2013:146–149), Mojapelo & Dube (2014b:4–5) and Mojapelo (2015:47–48). In some of provinces various policy initiatives are evident. De Vries and Van der Merwe (2004) published an article on all the school library policy initiatives in the Northern Cape, while developments in KZN, which has formulated its own provincial policy statement on school libraries under the auspices of the ELITS, have been reported on by Hart (2002:7), Du Toit (2009), Dubazana and Hoskins (2011:117–120) and Paton-Ash and Wilmot (2013:149). The training of

teacher-librarians is proposed as a solution to establish and manage functional school libraries in KZN province (Evans 2014:119).

An added issue of concern is the lack of qualified and motivated staff for school libraries. In a survey conducted in 1999 by the DBE and the HSRC it was found that only “20 percent of the staff responsible for the school library was appropriately qualified” (Stilwell 2007:100). Olën (1996) points out that about a quarter of employed teachers in South Africa had access to or have an experience of using a library. Post-apartheid policymakers and senior educational managers, who may not have experienced functional libraries, see school libraries and librarians as an unessential extra in schools (Karlsson 2003:7).

One positive development that has been noted is the National Policy for LIS (see section 6.2.3), which envisions a dedicated school library sub-directorate to be established within the DBE to lead the implementation of a school library policy (Nkondo, Hart & Nassimbeni 2018:66).

As it is well documented that well-resourced school libraries can improve learners’ reading skills and academic performance by between 10 and 20% (Bloch & Ndebele 2010:16), it can be argued that the roll out of school library policies needs to become a priority of the DBE.

It may therefore be concluded that further research is needed to explore the reasons why school library policies have not transformed from concept to legislation and, accordingly, been implemented in schools. The lack of functional school libraries has resulted in a lack of a reading culture, not only among learners but also among teachers.

The focus of the next section is the secondary analysis of the data obtained from the PIRLS 2011 survey. This analysis was undertaken to determine learners’ attitudes to reading, as well as teachers’ and school principals’ perceptions of learners’ attitudes to reading.

## **4.3 Secondary data analysis**

### **4.3.1 Introduction**

PIRLS was developed to improve the acquisition of reading skills and the teaching of reading worldwide. It was approved by the International Association for the Evaluation of Educational Achievement (IEA), which was founded in 1959 “for the purpose of conducting comparative studies focusing on educational policies and practices in countries around the world” (Mullis et al 2009:1). The results are intended for use by policymakers and researchers to improve reading achievement, as well as for countries to compare their results with those of other countries. South Africa has participated in the PIRLS 2006, 2011 and 2016 surveys.

According to Howie et al (2012:xvi), between the administration of the PIRLS 2006 and PIRLS 2011 study, no discernible improvement has been made in the reading achievement of South African learners: they achieved the lowest scores of all the countries who took part in the survey. In the PIRLS 2011 study, Grade 5 learners performed approximately 80 points below the international average score of 500 (Howie et al 2012: xvi).

This study analyses the South African data for the 2011 study from the international database. In the PIRLS 2011 study, background questionnaires were administered to learners and their parents, teachers and school principals. These questionnaires sought information associated with learners’ reading literacy (Mullis et al 2009:72). For the current study, specific questions from the learner, teacher and school principal questionnaires were analysed using descriptive statistics. Using this data, the analysis focused on the attitude towards reading of primary school children in South African schools who participated in the study, as well as the information reported by school

principals and teachers on the process of reading in the classroom. In South Africa, the latest information from the Education Management Information System (EMIS) was used to draw up national representative samples of participating schools (Howie et al 2012:xi). In South Africa, 341 schools participated in prePIRLS and 92 schools in PIRLS 2011. The prePIRLS was developed for countries identified as having low achievement in the previous PIRLS studies. The studies tested learners on two aspects of reading, namely reading for literary experience and reading to acquire information. In the following sections descriptive statistics from the PIRLS 2011 South African data will be analysed. As the focus is on libraries and reading, questions regarding school libraries, reading activities in the classroom, learners' attitudes towards reading, motivation to read, confidence in reading and reading activities outside the school were analysed. The complete list of descriptive statistics analysed in the sections below can be found in Appendix A.

#### **4.3.2 Descriptive statistics of the South African schools involved in PIRLS 2011**

The school principals and/or heads of departments answered questions relating to school characteristics; instructional time; resources and technology; parental involvement; school climate for learning; teaching staff; the role of the principal; and learners' reading readiness (Mullis et al 2009:73).

As the focus of this study is on reading and libraries, the descriptive statistics focus on questions regarding the library, resources and reading attitude (see tables 4.1 to 4.8).

A group of 92 schools from South Africa took part in the main PIRLS 2011 study. The sample of schools for the current study was selected from schools that had instruction in English and/or Afrikaans up to Grade 5 (Howie et al 2012:22). Only 72 schools indicated their status regarding the availability of a library. Of the 72 schools, 51 indicated that they had a library and 21 that they did not (table 4.1). Twenty school principals (21.7%) did not



answer the questions in tables 4.1 to 4.8, which is a limitation for the analysis. A possible explanation for the non-response may lie in the way the school principals interpreted the question: “Does your school have a school library?”. If their school only had book boxes and classroom reading corners they may have felt that this did not count as having a “proper library”. Furthermore, the researcher did not analyse all the questions in the PIRLS 2011 school questionnaire and therefore was unable to generalise as to why the questions in tables 4.1 to 4.8 received a non-response rate of 21.7%.

Of the 51 schools that indicated that they had a library, only four indicated that they had more than 10 000 books in their library (table 4.2). Nearly half (49%) of the schools replied (table 4.3) that the school’s capacity to provide instruction is affected somewhat or a lot by the shortage and inadequacy of library books. From this it can be reasoned that the shortage of well-stocked libraries is hampering teaching and learning.

Most of the principals (83%) characterised teachers’ expectations for learner achievement from high to medium (table 4.4). This correlates with the principals’ rating of 78% (table 4.5) when characterising learners’ desire to do well as high or medium. Compared with other areas of the curriculum, principals placed a great deal of emphasis (81%) on the teaching of reading (see table 4.6), 63% on writing (table 4.7) and 70% (table 4.8) on speaking and listening skills.

**Table 4.1: Schools with and without libraries**

<b>Schools with/without libraries</b>	<b>Frequency</b>	<b>Percent</b>
Schools with libraries	51	70.8
Schools without libraries	21	29.2
<b>Total:</b>	72	100.0
Non-response	20	21.7
<b>Total</b>	92	

**Table 4.2: Number of books with different titles in the school library**

<b>Number of titles</b>	<b>Frequency</b>	<b>Percent</b>
250 or fewer	3	6.0
251–500	7	14.0
501–2000	13	26.0
2001–5000	12	24.0
5001–10 000	11	22.0
More than 10 000	4	8.0
<b>Total:</b>	50	100.0
Omitted or invalid	1	1.1
Non-response	20	21.7
<b>Total</b>	92	

**Table 4.3: How much is the school's capacity to provide instruction affected by a shortage or inadequacy of library books?**

	<b>Frequency</b>	<b>Percent</b>
Not at all	20	27.8
A little	17	23.6
Some	21	29.2
A lot	14	19.4
<b>Total:</b>	72	100.0
Non-response	20	21.7
<b>Total:</b>	92	

**Table 4.4: How does the school principal characterise teachers' expectations for student achievement?**

	<b>Frequency</b>	<b>Percent</b>
Very high	11	15.5
High	41	57.7
Medium	18	25.4
Low	1	1.4
<b>Total:</b>	71	100.0
Omitted or invalid	1	1.1
Non-response	20	21.7
<b>Total:</b>	92	

**Table 4.5: How does the school principal characterise learners' desire to do well in school?**

	<b>Frequency</b>	<b>Percent</b>
Very high	4	5.6
High	23	32.4
Medium	32	45.1
Low	10	14.1
Very low	2	2.8
<b>Total:</b>	71	100.0
Omitted or invalid	1	1.1
Non-response	20	21.7
<b>Total:</b>	92	

**Table 4.6: Compared with other areas of the curriculum, how much emphasis does the school place on teaching reading?**

	<b>Frequency</b>	<b>Percent</b>
More emphasis	54	80.6
Same emphasis	12	17.9
Less emphasis	1	1.5
<b>Total:</b>	67	100.0
Omitted or invalid	5	5.4
Non-response	20	21.7
<b>Total</b>	92	

**Table 4.7: Compared with other areas of the curriculum, how much emphasis does the school place on teaching writing skills (not handwriting)?**

	<b>Frequency</b>	<b>Percent</b>
More emphasis	42	62.7
Same emphasis	24	35.8
Less emphasis	1	1.5
<b>Total:</b>	67	100.0
Omitted or invalid	5	5.4
Non-response	20	21.7
<b>Total</b>	92	

**Table 4.8: Compared with other areas of the curriculum, how much emphasis does the school place on teaching speaking/listening (oral language) skills?**

	<b>Frequency</b>	<b>Percent</b>
More emphasis	47	70.1
Same emphasis	20	29.9
<b>Total:</b>	67	100.0
Omitted or invalid	5	5.4
Non-response	20	21.7
<b>Total</b>	92	

As shown in the above discussion, it appears that school principals are positive towards reading and time spent on reading activities in schools. As it is well documented that well-resourced school libraries can improve learners' reading skills and academic performance by between 10 and 20% (Bloch & Ndebele 2010:16), it can be argued that the roll out of school library policies needs to become a priority of the DBE. The next section discusses the responses of teachers who answered questions from the Teachers' Questionnaire.

### **4.3.3 Descriptive statistics of the teachers involved in PIRLS 2011**

The teachers who taught reading answered questions about “[b]ackground and education; the school climate for learning; attitudes toward teaching; classroom characteristics; student engagement; reading instructional time; computer and library resources; homework; and preparation to teach reading” (Mullis et al 2009:73). As the focus of this study is on reading and libraries, the descriptive statistics will focus on questions regarding reading activities in the classroom (see tables 4.9 to 4.23).

### 4.3.3.1 Teachers' gender and highest level of education

Table 4.9 indicates the gender of the teachers. Grade 5 learners were taught by a majority of female teachers (72.1%), compared to 27.9% male teachers (table 4.9). Table 4.10 analyses the level of education attained by the teachers and indicates that most of the learners were taught by teachers with post-secondary education, e.g. vocational education or diploma (42%) or a first degree (36%). Notably, 7% of learners had teachers who indicated that their highest level of formal education was the completion of Grade 12. A small number of teachers (6.3%) did not indicate their gender or their level of education.

**Table 4.9: Gender distribution of teachers**

	<b>Frequency</b>	<b>Percent</b>
Female	75	72.1
Male	29	27.9
<b>Total:</b>	104	100.0
Non-response	7	6.3
<b>Total:</b>	111	

**Table 4.10: Highest level of formal education (teachers)**

<b>Level of education</b>	<b>Frequency</b>	<b>Percent</b>
Level 3 (Completion of Grade 12)	7	6.9
Level 4 (Technikon diploma)	43	42.2
Level 5A 1st (First degree)	37	36.3
Level 5A 2nd (Second degree e.g. honours)	15	14.7
<b>Total:</b>	102	100.0
Omitted or invalid	2	1.8
Non-response	7	6.3
<b>Total</b>	111	

#### **4.3.3.2 School buildings and overcrowded classrooms**

Teachers gave their views on the state of school buildings and whether or not their classrooms were overcrowded. Table 4.11 indicates that 30% of teachers reported that they had hardly any problems with the state of school buildings, while 70% of teachers reported minor to serious problems with the state of school buildings. In the South African PIRLS report, Howie et al (2012:89) note that reading achievement of learners in schools where teachers reported hardly any problems was higher than in schools where moderate problems were experienced. For 20% (table 4.12) of the teachers, classroom overcrowding was not regarded as a problem, while 46% reported it as a moderate to serious problem. A small number of teachers (6.3%) did not give their views on the state of school buildings and overcrowding.

**Table 4.11: Severity of the problem of school buildings that needs significant repair**

	<b>Frequency</b>	<b>Percent</b>
Not a problem	31	30.1
Minor problem	34	33.0
Moderate problem	20	19.4
Serious problem	18	17.5
<b>Total:</b>	103	100.0
Omitted or invalid	1	.9
Non-response	7	6.3
<b>Total</b>	111	

**Table 4.12: Severity of the problem of overcrowded classrooms**

	<b>Frequency</b>	<b>Percent</b>
Not a problem	21	20.2
Minor problem	35	33.7
Moderate problem	29	27.9
Serious problem	19	18.3
<b>Total:</b>	104	100.0
Non-response	7	6.3
<b>Total</b>	111	

### **4.3.3.3 Reading corners in classrooms**

The majority of teachers reported that they did have a reading corner in their classrooms (table 4.13). However, the quality and quantity of the reading resources in the classroom library/reading corner was not addressed in the survey. Forty-three percent of the



teachers (table 4.14) sent learners to a library other than the classroom reading corner at least once or twice a week, although answers do not reveal whether this was a school or a community library. Nine teachers (8.1%) did not answer the questions about reading corners in classrooms and about sending learners to other libraries.

**Table 4.13: Library or reading corner in the classroom**

	<b>Frequency</b>	<b>Percent</b>
Yes	70	70.0
No	30	30.0
<b>Total:</b>	100	100.0
Omitted or invalid	2	1.8
Non-response	9	8.1
<b>Total</b>	111	

**Table 4.14: Frequency of sending learners to a library other than the classroom library**

	<b>Frequency</b>	<b>Percent</b>
At least once or twice a week	41	43.2
Once or twice a month	16	16.8
A few times a year	17	17.9
Never or almost never	21	22.1
<b>Total:</b>	95	100.0
Omitted or invalid	7	6.3
Non-response	9	8.1
<b>Total</b>	111	

#### 4.3.3.4 Reading instruction

The majority of teachers reported that reading instruction in a typical week did not exceed five hours (table 4.15). In addition, 59% of the teachers reported that they made provision for advanced learners (table 4.16).

For reading instruction and reading activities the most frequently used resources as a basis for teaching were reported to be textbooks, worksheets and workbooks (Howie et al 2012:107). This correlates with the international average of 72% of teachers who reported that textbooks were used most often as a basis for reading instruction (Mullis et al 2012:235). In addition, there were teachers who reported that they also used a variety of children's books (61%), newspapers and magazines (71%) and reference materials (73%) to supplement reading instruction (tables 4.17–4.19). Eight percent of the teachers reported no feedback on reading instruction.

**Table 4.15: Time spent on reading instruction and/or reading activities with learners in a week**

Hours	Frequency	Percent
0–3	55	64.8
4–6	18	21.2
7–9	5	5.8
10–12	2	2.4
13–15	5	5.8
<b>Total:</b>	85	100.0
Omitted or invalid	17	15.3
Non-response	9	8.1
<b>Total</b>	111	

**Table 4.16: Provision for advanced readers to receive additional and more challenging reading instruction**

	<b>Frequency</b>	<b>Percent</b>
Yes	54	58.7
No	38	41.3
<b>Total:</b>	92	100.0
Omitted or invalid	10	9.0
Non-response	9	8.1
<b>Total</b>	111	

**Table 4.17: Use a variety of children’s books (e.g. novels, collections of short stories, nonfiction) during reading instruction and/or reading activities**

	<b>Frequency</b>	<b>Percent</b>
Basis for instruction	25	26.9
Supplement	57	61.3
Not used	11	11.8
<b>Total:</b>	93	100.0
Omitted or invalid	9	8.1
Non-response	9	8.1
<b>Total</b>	111	

**Table 4.18: Use of children’s newspapers and/or magazines during reading instruction and/or reading activities**

	<b>Frequency</b>	<b>Percent</b>
Basis for instruction	13	13.4
Supplement	69	71.1
Not used	15	15.5
<b>Total:</b>	97	100.0
Omitted or invalid	5	4.5
Non-response	9	8.1
<b>Total</b>	111	

**Table 4.19: Use of reference materials (e.g. encyclopaedia, dictionary) during reading instruction and/or reading activities**

	<b>Frequency</b>	<b>Percent</b>
Basis for instruction	18	18.6
Supplement	71	73.2
Not used	8	8.2
<b>Total:</b>	97	100.0
Omitted or invalid	5	4.5
Non-response	9	8.1
<b>Total</b>	111	

#### **4.3.3.5 Reading instruction: what do learners read?**

Teachers were asked how often learners read a variety of fiction and informational resources (tables 4.20–4.21), since it is important to encourage learners to actively read appropriate material. Fifty-three percent of teachers reported that learners read short

stories, fables, fairy tales, action stories, science fiction or detective stories once or twice a week during reading instruction/activities and 37% of teachers reported that learners read longer fiction books with chapters once or twice a week. Thirty-three percent teachers reported that learners read informational reading materials, e.g. nonfiction subject area books or textbooks every day and 34% of teachers stated once or twice a week (tables 4.22–4.23). It is noticeable that teachers reported that more learners read informational reading material than literary reading material. In the context of teacher training during the apartheid regime “it comes as no surprise that many teachers are not readers or library users themselves” and that this is an indication “that these teachers are not equipped to understand how the library can support their teaching and the learners’ learning” (Wessels & Mnkeni-Saurombe 2012:46). This is also referred to as the “Peter Effect” which is an allusion to a biblical text, meaning that “teachers who do not have a love of reading cannot expect their charges to read” (Hart 2013:51). Again, 8% of teachers did not respond to questions about what learners read. This correlates with the percentage of teachers who did not respond to the questions on reading instruction (tables 4.15–4.19).

**Table 4.20: Frequency of learners reading short stories, fables, fairy tales, action stories, science fiction and detective stories during reading instruction and/or reading activities**

	<b>Frequency</b>	<b>Percent</b>
Every or almost every day	15	15.6
Once or twice a week	51	53.1
Once or twice a month	23	24.0
Never or almost never	7	7.3
<b>Total:</b>	96	100.0
Omitted or invalid	6	5.4
Non-response	9	8.1
<b>Total</b>	111	

**Table 4.21: Frequency of learners reading longer fiction books with chapters during reading instruction and/or reading activities**

	<b>Frequency</b>	<b>Percent</b>
Every or almost every day	9	9.5
Once or twice a week	35	36.8
Once or twice a month	25	26.3
Never or almost never	26	27.4
<b>Total:</b>	95	100.0
Omitted or invalid	7	6.3
Non-response	9	8.1
<b>Total</b>	111	

**Table 4.22: Frequency of learners reading nonfiction subject area books or textbooks during reading instruction and/or reading activities**

	<b>Frequency</b>	<b>Percent</b>
Every or almost every day	32	34.0
Once or twice a week	31	33.0
Once or twice a month	19	20.2
Never or almost never	12	12.8
<b>Total:</b>	94	100.0
Omitted or invalid	8	7.2
Non-response	9	8.1
<b>Total</b>	111	

**Table 4.23: Frequency of learners reading longer nonfiction books with chapters during reading instruction and/or reading activities**

	<b>Frequency</b>	<b>Percent</b>
Every or almost every day	1	1.1
Once or twice a week	26	27.7
Once or twice a month	32	34.0
Never or almost never	35	37.2
<b>Total:</b>	94	100.0
Omitted or invalid	8	7.2
Non-response	9	8.1
<b>Total</b>	111	

#### **4.3.4 Descriptive statistics of the South African learners involved in PIRLS 2011**

Learners were asked questions about “[h]ome and school life; demographic information; home environment; school climate for learning; out-of-school reading behaviours and attitudes toward reading” (Mullis et al 2009:72). As the focus of this study is on reading and libraries the descriptive statistics will focus on questions regarding attitudes towards reading, reading activities outside the school and motivation to read.

##### **4.3.4.1 Profile of Grade 5 learners**

The profile of Grade 5 learners includes English and Afrikaans medium schools. Table 4.24 indicates the gender distribution of learners, with no significant difference being found between girls (49%) and boys (51%). There was, however, a significant gender gap in reading achievement, with Grade 5 girls performing better than Grade 5 boys (Howie

et al 2012:37). This correlates with international patterns of reading achievement. As table 4.25 indicates, the average age of the Grade 5 learners was 11 years.

Only 6.1% of the learners (table 4.26) indicated that they had more than 200 books at home, while nearly 70% (n = 2283) indicated that they had between zero and 25 books at home. Internationally, the achievement gap between learners with few and learners with many reading resources at home was found to be substantial (Howie et al 2012:62). It should also be noted that 17 learners (0.5%) did not indicate their gender or year of birth.

**Table 4.24: Gender distribution of learners**

	<b>Frequency</b>	<b>Percent</b>
Girl	1723	49.3
Boy	1775	50.7
<b>Total:</b>	3498	100.0
Non-response	17	0.5
<b>Total:</b>	3515	

**Table 4.25: Year of birth**

<b>Birth year</b>	<b>Frequency</b>	<b>Percent</b>
1998	250	7.2
1999	678	19.5
2000	2020	84.7
2001	483	13.7
2002	9	0.3
2003	3	0.1
2004	3	0.1
Other	36	1.0
Non-response	33	
<b>Total:</b>	3482	100.0
Omitted or invalid	16	0.5
Non-response	17	0.5
<b>Total</b>	3515	



**Table 4.26: How many books are there in your home?**

<b>Number of books</b>	<b>Frequency</b>	<b>Percent</b>
0–10	1352	40.9
11–25	931	28.2
26–100	575	17.4
101–200	243	7.4
200+	201	6.1
Non-response	213	
<b>Total:</b>	3302	100.0
Omitted or invalid	196	5.6
Non-response	17	0.5
<b>Total</b>	3515	

#### **4.3.4.2 Learners’ reading attitude**

In the consecutive PIRLS studies it has been shown that there is a strong positive relationship within countries between learners’ attitude towards reading and reading achievement (Mullis et al 2012:202). See also section 2.4 of this study for a discussion on reading attitude. To assess learners’ reading attitude a score was generated according to the learners’ responses, evaluating the degree of agreement with the following six statements: *I read only if I have to; I like talking about what I read with other people; I am happy if someone gives me a book as a present; I think reading is boring; I would like to have more time for reading; I enjoy reading* (tables 4.27–4.32). Only seventeen learners (0.5%) did not respond. Sixty-nine percent (table 4.27) of the learners strongly agreed that they enjoyed reading, while 55% of the learners strongly agreed that they liked talking to others about what they read. Sixty-six percent of the learners responded that they would be happy if they received a book as a present and 61% would love to have more time to read. Sixty-nine percent of the learners stated that they enjoyed reading and 50%

of learners (table 4.31) stated that they only read if they had to. Twenty-three percent of learners (table 4.32) strongly agreed that reading is boring, while 49% strongly agreed that reading is not boring.

**Table 4.27: Enjoy reading**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	2244	68.5
Agree a little	606	18.5
Disagree a little	232	7.1
Disagree a lot	192	5.9
<b>Total:</b>	3274	100.0
Omitted or invalid	224	6.4
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.28: Talking to others about what I read**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	1834	55.1
Agree a little	846	25.4
Disagree a little	310	9.3
Disagree a lot	336	10.1
<b>Total:</b>	3326	100.0
Omitted or invalid	172	4.9
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.29: Happy to receive a book as a present**

	Frequency	Percent
Agree a lot	2143	65.8
Agree a little	600	18.4
Disagree a little	283	8.7
Disagree a lot	230	7.1
Total:	3256	100.0
Omitted or invalid	242	6.9
Non-response	17	0.5
Total	3515	

**Table 4.30: Would like to have more time for reading**

	Frequency	Percent
Agree a lot	2008	61.8
Agree a little	701	21.6
Disagree a little	303	9.3
Disagree a lot	238	7.3
<b>Total:</b>	3250	100.0
Omitted or invalid	248	7.1
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.31: Read only if I have to**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	1665	50.0
Agree a little	660	19.8
Disagree a little	350	10.5
Disagree a lot	656	19.7
<b>Total:</b>	3331	100.0
Omitted or invalid	167	4.8
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.32: Think that reading is boring**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	754	23.4
Agree a little	507	15.8
Disagree a little	379	11.8
Disagree a lot	1579	49.1
<b>Total:</b>	3219	100.0
Omitted or invalid	279	7.9
Non-response	17	0.5
<b>Total</b>	3515	

#### **4.3.4.3 Learners' reasons/motivation for reading**

To assess learners' motivation to read they were asked to respond to the following statements: *I like to read things that make me think; it is important to be a good reader; my parents like it when I read; I learn a lot from reading; I need to read well for my future;*

*and I like it when a book helps me imagine other worlds.* Their responses are displayed in tables 4.33 to 4.38. On all six statements the majority of learners indicated that they agreed a lot: “I like to read things that make me think” (77%), “It is important to be a good reader” (80%), “My parents like it when I read” (79%), “I learn a lot from reading” (75%), “I need to read well for my future” (80%) and “I like it when a book helps me imagine other worlds” (74%). This demonstrates learners’ strong aspirational need to make the best use of an opportunity to read well. This is in contrast to the poor provision of resources and school libraries.

In the PIRLS 2011 study, the international average on motivation to read was found to be 74%, while the average for South African learners was 78% for Grade 5 learners but lower, at 68%, for the prePIRLS readers. (Mullis et al 2012:206–207). The proportion of learners who indicated that they were not motivated to read (6%) was slightly higher than the international average of 5%. Howie et al (2012:68) point out that learners who were motivated to read attained the highest reading achievement, while those who were not motivated achieved the lowest scores. This also illustrates that there is a relationship between motivation to read and reading achievement.

**Table 4.33: Like to read things that make me think**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	2544	76.8
Agree a little	529	16.0
Disagree a little	105	3.2
Disagree a lot	134	4.0
<b>Total:</b>	3312	100.0
Omitted or invalid	186	5.3
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.34: It is important to be a good reader**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	2618	79.8
Agree a little	454	13.8
Disagree a little	120	3.7
Disagree a lot	87	2.7
<b>Total:</b>	3279	100.0
Omitted or invalid	219	6.2
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.35: My parents like it when I read**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	2574	79.2
Agree a little	454	14.0
Disagree a little	140	4.3
Disagree a lot	82	2.5
<b>Total:</b>	3250	100.0
Omitted or invalid	248	7.1
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.36: Learn a lot from reading**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	2443	75.5
Agree a little	522	16.1
Disagree a little	141	4.4
Disagree a lot	128	4.0
<b>Total:</b>	3234	100.0
Omitted or invalid	264	7.5
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.37: Need to read well for my future**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	2607	80.1
Agree a little	391	12.0
Disagree a little	137	4.2
Disagree a lot	121	3.7
<b>Total:</b>	3256	100.0
Omitted or invalid	242	6.9
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.38: Like it when a book helps me imagine other worlds**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	2433	74.5
Agree a little	485	14.8
Disagree a little	188	5.8
Disagree a lot	161	4.9
<b>Total:</b>	3267	100.0
Omitted or invalid	231	6.6
Non-response	17	0.5
<b>Total</b>	3515	

#### **4.3.4.4 Learners' confidence in reading**

Results from consecutive PIRLS studies have shown “that children with greater self-efficacy or high self-esteem about themselves as readers typically are better readers” (Mullis et al 2012:211). Sixty-five percent of learners expressed confidence in their reading (table 4.39), while 47% indicated that their teachers also had confidence in their reading (table 4.43). Of the learners, 34% had trouble with difficult words in stories (table 4.42), while 26% (table 4.40) strongly agreed that reading is more difficult for them than for their classmates. Sixty-nine percent of learners (table 4.41) agreed that if a story was interesting they did not mind the difficult words. This shows persistence in improving their reading, even if they struggle with difficult words.



**Table 4.39: Reading is easy for me**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	2132	65.3
Agree a little	821	25.2
Disagree a little	176	5.4
Disagree a lot	135	4.1
<b>Total:</b>	3264	100.0
Omitted or invalid	234	6.6
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.40: Reading is more difficult for me than for my classmates**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	834	25.8
Agree a little	686	21.2
Disagree a little	469	14.5
Disagree a lot	1248	38.6
<b>Total:</b>	3237	100.0
Omitted or invalid	261	7.4
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.41: If a book is interesting, I do not care how hard it is to read**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	2172	66.8
Agree a little	592	18.2
Disagree a little	204	6.3
Disagree a lot	283	8.7
<b>Total:</b>	3251	100.0
Omitted or invalid	247	7.0
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.42: I have trouble reading stories with difficult words**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	1099	33.9
Agree a little	876	27.1
Disagree a little	448	13.8
Disagree a lot	815	25.2
<b>Total:</b>	3238	100.0
Omitted or invalid	260	7.4
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.43: Teacher praises my reading (says I am a good reader)**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	1525	46.9
Agree a little	1027	31.6
Disagree a little	357	11.0
Disagree a lot	344	10.6
<b>Total:</b>	3253	100.0
Omitted or invalid	245	7.0
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.44: Reading is more difficult than other subjects**

	<b>Frequency</b>	<b>Percent</b>
Agree a lot	811	25.0
Agree a little	586	18.1
Disagree a little	400	12.3
Disagree a lot	1444	44.6
<b>Total:</b>	3241	100.0
Omitted or invalid	257	7.3
Non-response	17	0.5
<b>Total</b>	3515	

It is encouraging to note that the non-response to questions about learners reading attitude, reading motivation and confidence in reading (tables 4.27 to 4.44) is only 0.5% which might be an indication of learners' positive attitude towards reading.

#### 4.3.4.5 Reading activities outside the school

The saying “practice makes perfect” can also be applied to reading. It is important to consider the time that learners spend on reading outside school hours, as reading for fun is also part of developing habits of lifelong learning and reading. Nearly half of the learners (n = 1416) read less than 30 minutes per day outside the school (table 4.45). Eighty-three percent (n = 2749) of learners reported that they themselves chose what to read (table 4.47). Nearly 50% of the learners responded that they read various types of reading material every day, or almost every day (tables 4.49–4.52). Forty-six percent of the learners borrowed books from a school or community library at least once a week and 20% borrowed books at least once or twice a month (table 4.53). Only seventeen learners (0.5%) did not respond to the questions asked about their reading activities outside school.

**Table 4.45: Time spent per day on reading outside of school**

	<b>Frequency</b>	<b>Percent</b>
Less than 30 minutes	1416	42.4
30 minutes to 1 hour	1024	30.6
1 hour to 2 hours	423	12.7
2 hours or more	480	14.4
<b>Total:</b>	3343	100.0
Omitted or invalid	155	4.4
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.46: Reading for fun outside of school**

	<b>Frequency</b>	<b>Percent</b>
Every day	1724	51.7
Once or twice a week	874	26.2
Once or twice a month	316	9.5
Never	422	12.6
<b>Total:</b>	3336	100.0
Omitted or invalid	162	4.6
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.47: Reading things I choose myself outside of school**

	<b>Frequency</b>	<b>Percent</b>
Every day	1897	57.2
Once or twice a week	852	25.7
Once or twice a month	309	9.3
Never	256	7.7
<b>Total:</b>	3314	100.0
Omitted or invalid	184	5.2
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.48: Read to find out about things I want to learn outside of school**

	<b>Frequency</b>	<b>Percent</b>
Every day	2130	64.0
Once or twice a week	647	19.4
Once or twice a month	347	10.4
Never	205	6.2
<b>Total:</b>	3329	100.0
Omitted or invalid	169	4.8
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.49: Read stories outside of school**

	<b>Frequency</b>	<b>Percent</b>
Every day or almost every day	1376	41.4
Once or twice a week	1007	30.3
Once or twice a month	361	10.9
Never or almost never	581	17.5
<b>Total:</b>	3325	100.0
Omitted or invalid	173	4.9
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.50: Read informational books outside of school**

	<b>Frequency</b>	<b>Percent</b>
Every day or almost every day	1587	48.4
Once or twice a week	970	29.6
Once or twice a month	400	12.2
Never or almost never	325	9.9
<b>Total:</b>	3282	100.0
Omitted or invalid	216	6.1
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.51: Read magazines outside of school**

	<b>Frequency</b>	<b>Percent</b>
Every day or almost every day	1485	45.7
Once or twice a week	912	28.1
Once or twice a month	435	13.4
Never or almost never	418	12.9
<b>Total:</b>	3250	100.0
Omitted or invalid	248	7.1
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.52: Read comics outside of school**

	<b>Frequency</b>	<b>Percent</b>
Every day or almost every day	1406	43.7
Once or twice a week	778	24.2
Once or twice a month	441	13.7
Never or almost never	596	18.5
<b>Total:</b>	3221	100.0
Omitted or invalid	277	7.9
Non-response	17	0.5
<b>Total</b>	3515	

**Table 4.53: Borrow books from your school or local library**

	<b>Frequency</b>	<b>Percent</b>
At least once a week	1537	45.9
Once or twice a month	668	19.9
A few times in a year	539	16.1
Never	605	18.1
<b>Total:</b>	3349	100.0
Omitted or invalid	149	4.2
Non-response	17	0.5
<b>Total</b>	3515	

### **4.3.5 Summary**

This section presented a descriptive analysis of the PIRLS 2011 data for South Africa where almost 20 000 Grade 4 and 5 learners from 400 schools participated. As the focus was on libraries and reading, questions regarding school libraries, reading activities in



classrooms, learners' attitudes towards reading, motivation to read, confidence in reading and reading activities outside the school were analysed. Of the 92 schools that took part in the main PIRLS 2011, only 51 indicated that they had a library. Nearly half (49%) of the schools indicated that the school's capacity to provide instruction is affected by a shortage of library books.

Principals placed emphasis on the teaching of reading, listening and speaking skills. Most of the principals (83%) characterised teachers' expectations for learner achievement from high to medium (table 4.4). As well-resourced school libraries can improve learners' reading skills and academic performance (Bloch & Ndebele 2010:16), it is imperative for the DBE to implement a school library policy and provide school libraries in all schools.

The majority of teachers had an average of 17 years' teaching experience (Howie et al 2012:113) and most had a post-secondary education (table 4.10). Teachers reported that overcrowded classrooms affected reading instruction. They also reported that in a typical week, reading instruction did not exceed five hours (table 4.15). The most frequently used resource for reading instruction was textbooks, although they also use a variety of other resources such as children's books, newspapers and reference materials for supplementary reading instruction.

The gender profile of Grade 5 learners indicates no significant difference between the percentages of girls (49%) and boys (51%) tested (see table 4.35) but a significant gender difference was noted in reading achievement, with Grade 5 girls performing better than the boys (Howie et al 2012:37). This correlates with international patterns of reading achievement (Mullis et al 2012:7).

The lack of a reading culture was apparent as only 6.1% of the learners (table 4.37) indicated that they had more than 200 books at home, while nearly 70% (n = 2283) indicated that they had zero to 25 books at home. However, learners' reading attitudes

were found to be very positive, with 69% of the learners (table 3.38) indicating that they were very fond of reading. The majority of learners were also highly motivated to read, with 80% (table 4.45) indicating that it is important to be a good reader. Howie et al (2012:68) point out that learners who are motivated to read generally have higher reading achievement scores. In addition, 65% of learners expressed confidence in their reading (table 4.50) and nearly 50% responded that they read various types of reading material every day or almost every day (tables 4.59–4.63). The positive attitude and motivation to read thus displayed gives clear evidence of learners' aspirations to read well. However, these aspirations do not appear to be supported, due to the poor provision of resources is poor and an absence of functional school libraries which do not promote reading in learners.

The above descriptive statistics in relation to school principals, teachers and learners indicate that school principals and teachers are aware of the importance of reading. Moreover the evidence shows that learners have a positive attitude towards reading and that they know that their future depends on their ability to read. Moreover, school principals and teachers are aware of the importance of reading. Notwithstanding these results, it would appear that in the presence of poor resource provision and the absence of functional school libraries learners' reading is not supported. However, there do appear to be areas where some positive developments in reading are taking place, despite the lack of school library policies. Do these results in part challenge the often-repeated claim that South Africa does not have a reading culture?

#### **4.4 Conclusion for Sections 4.2 and 4.3**

This study utilised secondary data analysis and a systematic literature review to establish whether the lack of access to functional school libraries is a contributing factor to the reading inadequacy and low reading achievement of primary school learners in South

Africa, and whether this is further exacerbated by the non-implementation of official school library policies.

The secondary data were retrieved from the PIRLS 2011 study and the systematic literature review searched electronic databases for articles/studies on school library policies in primary school libraries in South Africa from 1994 to 2017.

In the systematic literature review (section 4.2), research and theory gleaned from articles and reports on school library policies in primary schools in South Africa from 1994 to 2017 were considered. The secondary data analysis of the PIRLS 2011 study (section 4.3) determined learners' attitudes to reading, as well as teachers' and school principals' perceptions of learners' attitudes to reading.

The results of the systematic literature review and secondary data analysis appears to confirm that it remains incumbent on the DBE to resolve the issues in relation to the lack of the support for official school library policies. Moreover the evidence shows that learners have a positive attitude towards reading and that they know that their future depends on their ability to read.

# Chapter 5

## Summary, Conclusions and Recommendations

### 5.1 Introduction

The previous chapter provided an interpretation and discussion of the findings of the systematic literature review on school library policies and the analysis of descriptive statistics regarding the schools, teachers and learners involved in the PIRLS 2011 survey. This study was prompted by concerns relating to the lack of functional school libraries in South African primary schools. In line with the objectives of this study, this chapter summarises the research findings, draws a number of conclusions and makes certain recommendations.

The aims of the study were to explore the influence of school libraries on the reading attitudes of primary school learners in South Africa, and to explore the reasons for the lack of implementation of school library policies. These aims were addressed by means of a secondary analysis of the data pertaining to the PIRLS 2011 dataset using an integrated qualitative-quantitative approach. In addition, a systematic literature review was conducted of literature published between 1994 and 2017 in South Africa in order to contextualise research and identify and analyse journal articles and reports on school library policies for primary schools.

## **5.2 Conclusions pertaining to the research questions**

The main research question addressed in this study, as formulated in chapter 1, was: Does the availability of school libraries and school library policies have an influence on primary school learners' reading attitudes and reading achievement? The following sub-questions were asked:

- What are the self-reported reading attitudes of Grade 5 learners from South Africa who participated in the PIRLS 2011 study?
- What is the influence of school libraries on the reading attitudes of learners?
- Are there reasons for the non-implementation of school library policies?

### **5.2.1 Primary school learners' reading attitude**

From the literature review it became evident that learners' attitudes towards reading and their reading achievement are closely related. In the consecutive PIRLS studies it has been shown that there is a strong positive relationship within countries between learners' attitude towards reading and reading achievement (Mullis et al 2012: 202). The results of the PIRLS 2011 study show that 69% (table 4.38) of the learners strongly agreed that they enjoyed reading, which is an indicator of a positive attitude towards reading.

It has been found that the reading attitude of learners is influenced by various factors (as discussed in section 2.7.3). These factors include access to books, classroom libraries and classroom reading activities. The results of the International PIRLS 2011 study confirm that the lack of access to books contributes to the learners' low reading level. Access to classroom libraries may help to enhance literacy, develop reading and stimulate the desire to read. One of the findings of the South African PIRLS 2011 study was that only 29% of teachers reported having a classroom library with access to more

than 50 books. A positive step towards increasing classroom reading activities was taken by the Minister of Basic Education, Mrs Angie Motshekga in September 2015 when she initiated the *Drop All and Read Campaign*. In terms of this campaign, schools are expected to observe a mandatory 30 minutes of reading every week.

As the South African PIRLS 2011 results show, 69% of learners indicated that they enjoyed reading, 66% percent indicated that they would be happy to receive a book as a present and only 23% indicated that they thought reading was boring. Moreover, 80% of the learners indicated that it is important to be a good reader. This positive attitude displayed by learners towards reading highlights the huge disservice that is being done to them by failing to provide functional school libraries.

## **5.2.2 Influence of school libraries on learners' reading attitude**

From the narrative literature review it was established that school libraries are important and certainly have an effect on learners' reading. Furthermore, it is evident from the literature that resource-rich school libraries play a key role in the promotion of reading. Despite this key role, many challenges have been identified that hamper the provision of schooling in general and libraries in particular in South Africa. These challenges include the legacy of apartheid, rural poverty, lack of school funding, as well as high rates of failure and dropout. These problems are exacerbated by the backlog experienced in the provision of basic facilities. In the South African PIRLS 2011 study of grade five learners, of the 51 schools that indicated that they had a school library only four had a collection of more than 10 000 books.

In view of the fact that 81% of school principals placed a great deal of emphasis on the teaching of reading and nearly half (49%) responded that the capacity of their schools to provide instruction was hampered by the shortage and inadequacy of library books, it can

be concluded that the shortage of well-stocked libraries is hampering teaching and learning.

### **5.2.3 Reasons for the non-implementation of school library policies**

The main focus of the 39 articles examined for the systematic literature review was the fact that the National Guidelines for School Library and Information Services need to be finalised and implemented. The reasons for the lack of policy implementation is reported here in terms of three themes, namely, the impact of apartheid, advocacy for school libraries and library policies.

#### **5.2.3.1 Impact of apartheid**

Currently, the impact of apartheid policies is still evident in the South African education sector. It is particularly evident in poor rural areas in relation to the skewed allocation of resources to schools that are mainly attended by black learners. The results show that twenty-five years into the new democratic dispensation, 80% of South African schools still have no libraries.

#### **5.2.3.2 Advocacy for school libraries**

It was reported that the civic movement, Equal Education, with its campaign slogan “1 school 1 library 1 librarian”, plays a significant role in advocacy for school libraries. It was observed that both teachers and school librarians as well as the LIS sector need to lobby more aggressively for the provision of functional school libraries.

### **5.2.3.3 School library policies**

Since 1994, the DBE has published five drafts of the National Guidelines for School Library and Information Services. Challenges identified in the implementation of these guidelines/policy are as follows:

- Inadequacies in institutional infrastructure.
- Lack of support by the DBE to finalise the policy.
- Lack of human, physical and financial resources.
- An imbalance in the distribution of educational resources created by the legacy of apartheid policies.
- Tertiary institutions ceasing to train school librarians.
- Backlogs in school infrastructure.

It has been reported in a number of studies (Hart 2002:7; Du Toit 2009; De Vries 2009:160–162; Dubazana & Hoskins 2011:117–120; Paton-Ash & Wilmot 2013:149) that some provinces in South Africa have formulated their own provincial statements on school library policies. For example, KZN has drawn up its own provincial statement on school libraries.

Because post-apartheid policymakers and senior educational managers did not experience functional school libraries during their education or their training, they may perceive school libraries as an inessential extra in schools (Karlsson 2003:7).

In section 6.2.3 of the 2018 draft National Policy for LIS, it is envisioned that a dedicated school library sub-directorate will be established in the DBE to lead the implementation of a school library policy (Nkondo, Hart & Nassimbeni 2018:66).



## **5.3 Recommendations**

The following recommendations are proposed based on the findings

- Progress in meeting minimum norms for school infrastructure should be speeded up to create a space for a functional school library at all schools.
- Access to books for primary school learners should be improved.
- The National Guidelines for school libraries should be finalised and implemented to help with planning and reforming school libraries.

## **5.4 Further research**

This study recommends that further research be conducted on the following topics:

- Further research is needed to explore the reasons why school library policies have not changed from concept to legislation or been implemented in schools.
- Implementation guidelines should be drawn up for the establishment of functional school libraries in all schools.

## **5.5 Conclusion**

This chapter concludes the study. It summarised the findings of the study and made a number of recommendations to assist with the provision of functional school libraries in all schools. The general conclusion drawn from this study is that learners have a positive attitude towards reading and that there is a correlation between reading and achievement. Although this study cannot be generalised to all primary schools in South Africa, it can be assumed that the findings could apply to most South African primary schools. The findings and recommendations of this study are submitted in the hope that the lack of functional

school libraries will be addressed and the provision of such libraries improved, and that learners will be nurtured to become a nation of readers.

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# Appendices

## APPENDIX A: Dataset from PIRLS 2011 for South Africa

### Frequency Table (Tables 4.1 tot 4.8)

**(Table 4.1) GENEXISTING SCHOOL LIBRARY**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	YES	51	55.4	70.8	70.8
	NO *(IF NO, GO TO #10)*	21	22.8	29.2	100.0
	Total	72	78.3	100.0	
Missing	System	20	21.7		
Total		92	100.0		

**(Table 4.2) GEN\BOOKS WITH DIFFERENT TITLES**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	250 OR FEWER	3	3.3	6.0	6.0
	251-500	7	7.6	14.0	20.0
	501-2000	13	14.1	26.0	46.0
	2001-5000	12	13.0	24.0	70.0
	5001-10000	11	12.0	22.0	92.0
	MORE THAN 10000	4	4.3	8.0	100.0
	Total	50	54.3	100.0	
Missing	LOGICALLY NOT APPLICABLE	21	22.8		
	OMITTED OR INVALID	1	1.1		
	System	20	21.7		
	Total	42	45.7		
Total		92	100.0		

**(Table 4.3) GEN\SHORTAGE\READ\LIBRARY BOOKS**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	NOT AT ALL	20	21.7	27.8	27.8
	A LITTLE	17	18.5	23.6	51.4
	SOME	21	22.8	29.2	80.6

	A LOT	14	15.2	19.4	100.0
	Total	72	78.3	100.0	
Missing	System	20	21.7		
Total		92	100.0		

**(Table 4.4) GEN\SCH CHARACTER\TCH EXPECTATIONS**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	VERY HIGH	11	12.0	15.5	15.5
	HIGH	41	44.6	57.7	73.2
	MEDIUM	18	19.6	25.4	98.6
	LOW	1	1.1	1.4	100.0
	Total	71	77.2	100.0	
Missing	OMITTED OR INVALID	1	1.1		
	System	20	21.7		
	Total	21	22.8		
Total		92	100.0		

**(Table 4.5) GEN\SCH CHARACTER\STD DESIRE TO DO WELL**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	VERY HIGH	4	4.3	5.6	5.6
	HIGH	23	25.0	32.4	38.0
	MEDIUM	32	34.8	45.1	83.1
	LOW	10	10.9	14.1	97.2
	VERY LOW	2	2.2	2.8	100.0
	Total	71	77.2	100.0	
Missing	OMITTED OR INVALID	1	1.1		
	System	20	21.7		
	Total	21	22.8		
Total		92	100.0		

**(Table 4.6) GEN\EMPHASIS\READING**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	MORE EMPHASIS	54	58.7	80.6	80.6
	SAME EMPHASIS	12	13.0	17.9	98.5
	LESS EMPHASIS	1	1.1	1.5	100.0
	Total	67	72.8	100.0	

Missing	OMITTED OR INVALID	5	5.4		
	System	20	21.7		
	Total	25	27.2		
Total		92	100.0		

**(Table 4.7) GEN\EMPHASIS\WRITING**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	MORE EMPHASIS	42	45.7	62.7	62.7
	SAME EMPHASIS	24	26.1	35.8	98.5
	LESS EMPHASIS	1	1.1	1.5	100.0
	Total	67	72.8	100.0	
Missing	OMITTED OR INVALID	5	5.4		
	System	20	21.7		
	Total	25	27.2		
Total		92	100.0		

**(Table 4.8) GEN\EMPHASIS\SPEAKING**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	MORE EMPHASIS	47	51.1	70.1	70.1
	SAME EMPHASIS	20	21.7	29.9	100.0
	Total	67	72.8	100.0	
Missing	OMITTED OR INVALID	5	5.4		
	System	20	21.7		
	Total	25	27.2		
Total		92	100.0		

**Dataset & Frequencies for Tables 4.1 tot 4.8**

```

DATASET ACTIVATE DataSet1.
FREQUENCIES VARIABLES=ACBG09 ACBG09A ACBG09B ACBG10BC ACBG12D ACBG12H
ACB G18A ACBG18B
ACBG18C ACBG17A
ACBG17B ACBG17C ACBG17D ACBG17E ACBG17F ACBG17G ACBG17H ACBG17I ACBG17
J ACBG17K ACBG17M ACBG17N ACBG12H
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MOD E SUM
/HISTOGRAM
/ORDER=ANALYSIS.

```

[DataSet1]

C:\Users\scherv\AppData\Local\Temp\Temp1\_P11\_SPSSData\_pt2.zip\acgzafr3.sav

**Statistics**

		GEN\EXISTING SCHOOL LIBRARY	GEN\BOOKS WITH DIFFERENT TITLES	GEN\MAGAZINES WITH DIFFERENT TITLES	GEN\SHORTAGE\READ\LIBRARY BOOKS
N	Valid	72	50	49	72
	Missing	20	42	43	20
Mean		1.29	3.66	2.51	2.40
Std. Error of Mean		.054	.191	.189	.129
Median		1.00	4.00	2.00	2.00
Mode		1	3	2	3
Std. Deviation		.458	1.349	1.325	1.096
Variance		.210	1.821	1.755	1.202
Range		1	5	4	3
Minimum		1	1	1	1
Maximum		2	6	5	4
Sum		93	183	123	173

**Statistics**

		GEN\SCH CHARACTERISTICS	GEN\SCH CHARACTERISTICS TO DO WELL	GEN\EMPHASIS\READING	GEN\EMPHASIS\WRITING
N	Valid	71	71	67	67
	Missing	21	21	25	25
Mean		2.13	2.76	1.21	1.39
Std. Error of Mean		.080	.103	.054	.064
Median		2.00	3.00	1.00	1.00
Mode		2	3	1	1
Std. Deviation		.675	.870	.445	.521
Variance		.455	.756	.198	.271
Range		3	4	2	2
Minimum		1	1	1	1

Maximum	4	5	3	3
Sum	151	196	81	93

**Statistics**

		GEN\EMPHASIS\SPEAKING	GEN\READING SKILLS\KNOW LETTERS	GEN\READING SKILLS\KNOW LETTERS\OUN D	GEN\READING SKILLS\READING WORDS
N	Valid	67	69	69	68
	Missing	25	23	23	24
Mean		1.30	1.28	1.41	1.31
Std. Error of Mean		.056	.094	.106	.101
Median		1.00	1.00	1.00	1.00
Mode		1	1	1	1
Std. Deviation		.461	.784	.880	.833
Variance		.213	.614	.774	.694
Range		1	4	4	4
Minimum		1	1	1	1
Maximum		2	5	5	5
Sum		87	88	97	89

**Statistics**

		GEN\READING SKILLS\READ SENTENCES	GEN\READING SKILLS\READ TEXT	GEN\READING SKILLS\LOCATING INFORMATION	GEN\READING SKILLS\MAIN IDEAS
N	Valid	69	68	69	69
	Missing	23	24	23	23
Mean		1.52	1.91	2.26	2.59
Std. Error of Mean		.110	.116	.122	.126
Median		1.00	2.00	2.00	3.00
Mode		1	1	2	2 <sup>a</sup>
Std. Deviation		.917	.958	1.010	1.048
Variance		.841	.917	1.019	1.098
Range		4	4	4	4
Minimum		1	1	1	1



Maximum	5	5	5	5
Sum	105	130	156	179

**Statistics**

		GEN\READING SKILLS\UNDE RSTANDING	GEN\READING SKILLS\COMP. WITH EXPERIENCE	GEN\READING SKILLS\COMP ARE DIFF. TEXTS	GEN\READING SKILLS\MAKIN G PREDICTIONS
N	Valid	69	69	69	69
	Missing	23	23	23	23
Mean		2.74	2.86	3.32	2.83
Std. Error of Mean		.141	.148	.145	.173
Median		3.00	3.00	4.00	3.00
Mode		3	3	4	1
Std. Deviation		1.171	1.228	1.207	1.434
Variance		1.372	1.508	1.456	2.058
Range		4	4	4	4
Minimum		1	1	1	1
Maximum		5	5	5	5
Sum		189	197	229	195

**Statistics**

		GEN\READING SKILLS\DESCR IBING STYLE	GEN\READING SKILLS\AUTH ORS PERSPECTIVE
N	Valid	69	69
	Missing	23	23
Mean		4.01	4.12
Std. Error of Mean		.145	.142
Median		4.00	5.00
Mode		5	5
Std. Deviation		1.207	1.182
Variance		1.456	1.398
Range		4	4
Minimum		1	1

Maximum	5	5
Sum	277	284

## Frequency Table (Tables 4.24 tot 4.53)

**(Table 4.24) GEN\SEX OF STUDENT**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	GIRL	1723	49.0	49.3	49.3
	BOY	1775	50.5	50.7	100.0
	Total	3498	99.5	100.0	
Missing	System	17	.5		
Total		3515	100.0		

**(Table 4.25) GEN\DATE OF BIRTH\YEAR**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	1998	250	7.1	7.2	7.2
	1999	678	19.3	19.5	26.7
	2000	2020	57.5	58.0	84.7
	2001	483	13.7	13.9	98.5
	2002	9	.3	.3	98.8
	2003	3	.1	.1	98.9
	2004	3	.1	.1	99.0
	OTHER	36	1.0	1.0	100.0
	Total	3482	99.1	100.0	
Missing	OMITTED OR INVALID	16	.5		
	System	17	.5		
	Total	33	.9		
Total		3515	100.0		

**(Table 4.26) GEN\AMOUNT OF BOOKS IN YOUR HOME**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	NONE OR FEW (0-10)	1352	38.5	40.9	40.9
	ONE SHELF (11-25)	931	26.5	28.2	69.1

	ONE BOOKCASE (26-100)	575	16.4	17.4	86.6
	TWO BOOKCASES (101-200)	243	6.9	7.4	93.9
	THREE ORE MORE BOOKCASES (200+)	201	5.7	6.1	100.0
	Total	3302	93.9	100.0	
Missing	OMITTED OR INVALID	196	5.6		
	System	17	.5		
	Total	213	6.1		
Total		3515	100.0		

**(Table 4.45) READ\TIME SPENT READING OUTSIDE SCHOOL**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	LESS THAN 30 MINUTES	1416	40.3	42.4	42.4
	30 MINUTES TO 1 HOUR	1024	29.1	30.6	73.0
	1 HOUR TO 2 HOURS	423	12.0	12.7	85.6
	2 HOURS OR MORE	480	13.7	14.4	100.0
	Total	3343	95.1	100.0	
Missing	OMITTED OR INVALID	155	4.4		
	System	17	.5		
	Total	172	4.9		
Total		3515	100.0		

**(Table 4.46) READ\HOW OFTEN\READ FOR FUN**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	EVERY DAY	1724	49.0	51.7	51.7
	ONCE OR TWICE A WEEK	874	24.9	26.2	77.9
	ONCE OR TWICE A MONTH	316	9.0	9.5	87.4
	NEVER	422	12.0	12.6	100.0
	Total	3336	94.9	100.0	
Missing	OMITTED OR INVALID	162	4.6		
	System	17	.5		
	Total	179	5.1		
Total		3515	100.0		

**(Table 4.47) READ\HOW OFTEN\READ CHOSEN THINGS**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	EVERY DAY	1897	54.0	57.2	57.2
	ONCE OR TWICE A WEEK	852	24.2	25.7	83.0
	ONCE OR TWICE A MONTH	309	8.8	9.3	92.3
	NEVER	256	7.3	7.7	100.0
	Total	3314	94.3	100.0	
Missing	OMITTED OR INVALID	184	5.2		
	System	17	.5		
	Total	201	5.7		
Total		3515	100.0		

**(Table 4.48) READ\HOW OFTEN\READ STH TO LEARN**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	EVERY DAY	2130	60.6	64.0	64.0
	ONCE OR TWICE A WEEK	647	18.4	19.4	83.4
	ONCE OR TWICE A MONTH	347	9.9	10.4	93.8
	NEVER	205	5.8	6.2	100.0
	Total	3329	94.7	100.0	
Missing	OMITTED OR INVALID	169	4.8		
	System	17	.5		
	Total	186	5.3		
Total		3515	100.0		

**(Table 4.49) READ\HOW OFTEN\OUTSIDE SCHOOL\STORIES**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	EVERY DAY	1376	39.1	41.4	41.4
	ONCE OR TWICE A WEEK	1007	28.6	30.3	71.7
	ONCE OR TWICE A MONTH	361	10.3	10.9	82.5
	NEVER	581	16.5	17.5	100.0
	Total	3325	94.6	100.0	

Missing	OMITTED OR INVALID	173	4.9		
	System	17	.5		
	Total	190	5.4		
Total		3515	100.0		

**(Table 4.50) READ\HOW OFTEN\OUTSIDE SCHOOL\BOOKS**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	EVERY DAY	1587	45.1	48.4	48.4
	ONCE OR TWICE A WEEK	970	27.6	29.6	77.9
	ONCE OR TWICE A MONTH	400	11.4	12.2	90.1
	NEVER	325	9.2	9.9	100.0
	Total	3282	93.4	100.0	
Missing	OMITTED OR INVALID	216	6.1		
	System	17	.5		
	Total	233	6.6		
Total		3515	100.0		

**(Table 4.51) READ\HOW OFTEN\OUTSIDE SCHOOL\MAGAZINES**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	EVERY DAY	1485	42.2	45.7	45.7
	ONCE OR TWICE A WEEK	912	25.9	28.1	73.8
	ONCE OR TWICE A MONTH	435	12.4	13.4	87.1
	NEVER	418	11.9	12.9	100.0
	Total	3250	92.5	100.0	
Missing	OMITTED OR INVALID	248	7.1		
	System	17	.5		
	Total	265	7.5		
Total		3515	100.0		

**(Table 4.52) READ\HOW OFTEN\OUTSIDE SCHOOL\COMICS**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	EVERY DAY	1406	40.0	43.7	43.7
	ONCE OR TWICE A WEEK	778	22.1	24.2	67.8

	ONCE OR TWICE A MONTH	441	12.5	13.7	81.5
	NEVER	596	17.0	18.5	100.0
	Total	3221	91.6	100.0	
Missing	OMITTED OR INVALID	277	7.9		
	System	17	.5		
	Total	294	8.4		
Total		3515	100.0		

**(Table 4.53) READ\HOW OFTENBORROW BOOKS SCHOOL LIBRA**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	AT LEAST ONCE A WEEK	1537	43.7	45.9	45.9
	ONCE OR TWICE A MONTH	668	19.0	19.9	65.8
	A FEW TIMES IN A YEAR	539	15.3	16.1	81.9
	NEVER	605	17.2	18.1	100.0
	Total	3349	95.3	100.0	
Missing	OMITTED OR INVALID	149	4.2		
	System	17	.5		
	Total	166	4.7		
Total		3515	100.0		

**(Table 4.39) READ\AGREE\READING IS EASY**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	AGREE A LOT	2132	60.7	65.3	65.3
	AGREE A LITTLE	821	23.4	25.2	90.5
	DISAGREE A LITTLE	176	5.0	5.4	95.9
	DISAGREE A LOT	135	3.8	4.1	100.0
	Total	3264	92.9	100.0	
Missing	OMITTED OR INVALID	234	6.7		
	System	17	.5		
	Total	251	7.1		
Total		3515	100.0		

**(Table 4.40) READ\AGREE\READ HARDER THAN FOR OTHERS**

Frequency			Percent	Valid Percent	Cumulative Percent
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Valid	AGREE A LOT	834	23.7	25.8	25.8
	AGREE A LITTLE	686	19.5	21.2	47.0
	DISAGREE A LITTLE	469	13.3	14.5	61.4
	DISAGREE A LOT	1248	35.5	38.6	100.0
	Total	3237	92.1	100.0	
Missing	OMITTED OR INVALID	261	7.4		
	System	17	.5		
	Total	278	7.9		
Total		3515	100.0		

**(Table 4.41) READ\AGREE\INTERESTING HARD TO READ BOOK**

Frequency		Percent	Valid Percent	Cumulative Percent
Valid	AGREE A LOT	2172	61.8	66.8
	AGREE A LITTLE	592	16.8	18.2
	DISAGREE A LITTLE	204	5.8	6.3
	DISAGREE A LOT	283	8.1	8.7
	Total	3251	92.5	100.0
Missing	OMITTED OR INVALID	247	7.0	
	System	17	.5	
	Total	264	7.5	
Total		3515	100.0	

**(Table 4.42) READ\AGREE\TROUBLE DIFFICULT WORDS**

Frequency		Percent	Valid Percent	Cumulative Percent
Valid	AGREE A LOT	1099	31.3	33.9
	AGREE A LITTLE	876	24.9	27.1
	DISAGREE A LITTLE	448	12.7	13.8
	DISAGREE A LOT	815	23.2	25.2
	Total	3238	92.1	100.0
Missing	OMITTED OR INVALID	260	7.4	
	System	17	.5	
	Total	277	7.9	
Total		3515	100.0	

**(Table 4.43) READ\AGREE\TEACHER PRAISES FOR READING**

Frequency		Percent	Valid Percent	Cumulative Percent
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Valid	AGREE A LOT	1525	43.4	46.9	46.9
	AGREE A LITTLE	1027	29.2	31.6	78.5
	DISAGREE A LITTLE	357	10.2	11.0	89.4
	DISAGREE A LOT	344	9.8	10.6	100.0
	Total	3253	92.5	100.0	
Missing	OMITTED OR INVALID	245	7.0		
	System	17	.5		
	Total	262	7.5		
Total		3515	100.0		

**(Table 4.44) READ\AGREE\READ HARDER THAN OTHER THINGS**

Frequency		Percent	Valid Percent	Cumulative Percent
Valid	AGREE A LOT	811	23.1	25.0
	AGREE A LITTLE	586	16.7	43.1
	DISAGREE A LITTLE	400	11.4	55.4
	DISAGREE A LOT	1444	41.1	100.0
	Total	3241	92.2	100.0
Missing	OMITTED OR INVALID	257	7.3	
	System	17	.5	
	Total	274	7.8	
Total		3515	100.0	

**(Table 4.33) READ\AGREE\LIKE READ THINGS MAKE THINK**

Frequency		Percent	Valid Percent	Cumulative Percent
Valid	AGREE A LOT	2544	72.4	76.8
	AGREE A LITTLE	529	15.0	92.8
	DISAGREE A LITTLE	105	3.0	96.0
	DISAGREE A LOT	134	3.8	100.0
	Total	3312	94.2	100.0
Missing	OMITTED OR INVALID	186	5.3	
	System	17	.5	
	Total	203	5.8	
Total		3515	100.0	

**(Table 4.34) READ\AGREE\IMPORTANT TO BE GOOD READER**

Frequency		Percent	Valid Percent	Cumulative Percent
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Valid	AGREE A LOT	2618	74.5	79.8	79.8
	AGREE A LITTLE	454	12.9	13.8	93.7
	DISAGREE A LITTLE	120	3.4	3.7	97.3
	DISAGREE A LOT	87	2.5	2.7	100.0
	Total	3279	93.3	100.0	
Missing	OMITTED OR INVALID	219	6.2		
	System	17	.5		
	Total	236	6.7		
Total		3515	100.0		

**(Table 4.35) READ\AGREE\PARENTS LIKE WHEN I READ**

Frequency		Percent	Valid Percent	Cumulative Percent
Valid	AGREE A LOT	2574	73.2	79.2
	AGREE A LITTLE	454	12.9	93.2
	DISAGREE A LITTLE	140	4.0	97.5
	DISAGREE A LOT	82	2.3	100.0
	Total	3250	92.5	100.0
Missing	OMITTED OR INVALID	248	7.1	
	System	17	.5	
	Total	265	7.5	
Total		3515	100.0	

**(Table 4.36) READ\AGREE\LEARN A LOT FROM READING**

Frequency		Percent	Valid Percent	Cumulative Percent
Valid	AGREE A LOT	2443	69.5	75.5
	AGREE A LITTLE	522	14.9	91.7
	DISAGREE A LITTLE	141	4.0	96.0
	DISAGREE A LOT	128	3.6	100.0
	Total	3234	92.0	100.0
Missing	OMITTED OR INVALID	264	7.5	
	System	17	.5	
	Total	281	8.0	
Total		3515	100.0	

**(Table 4.37) READ\AGREE\NEED READ WELL FOR FUTURE**

Frequency		Percent	Valid Percent	Cumulative Percent
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Valid	AGREE A LOT	2607	74.2	80.1	80.1
	AGREE A LITTLE	391	11.1	12.0	92.1
	DISAGREE A LITTLE	137	3.9	4.2	96.3
	DISAGREE A LOT	121	3.4	3.7	100.0
	Total	3256	92.6	100.0	
Missing	OMITTED OR INVALID	242	6.9		
	System	17	.5		
	Total	259	7.4		
Total		3515	100.0		

**(Table 4.38) READ\AGREE\BOOK HELPS IMAGE OTHER WORLDS**

Frequency		Percent	Valid Percent	Cumulative Percent
Valid	AGREE A LOT	2433	69.2	74.5
	AGREE A LITTLE	485	13.8	14.8
	DISAGREE A LITTLE	188	5.3	5.8
	DISAGREE A LOT	161	4.6	4.9
	Total	3267	92.9	100.0
Missing	OMITTED OR INVALID	231	6.6	
	System	17	.5	
	Total	248	7.1	
Total		3515	100.0	

**(Table 4.31) READ\AGREE\READ ONLY IF I HAVE TO**

Frequency		Percent	Valid Percent	Cumulative Percent
Valid	AGREE A LOT	1665	47.4	50.0
	AGREE A LITTLE	660	18.8	19.8
	DISAGREE A LITTLE	350	10.0	10.5
	DISAGREE A LOT	656	18.7	19.7
	Total	3331	94.8	100.0
Missing	OMITTED OR INVALID	167	4.8	
	System	17	.5	
	Total	184	5.2	
Total		3515	100.0	

**(Table 4.28) READ\AGREE\TALKING ABOUT WHAT I READ**

Frequency		Percent	Valid Percent	Cumulative Percent
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Valid	AGREE A LOT	1834	52.2	55.1	55.1
	AGREE A LITTLE	846	24.1	25.4	80.6
	DISAGREE A LITTLE	310	8.8	9.3	89.9
	DISAGREE A LOT	336	9.6	10.1	100.0
	Total	3326	94.6	100.0	
Missing	OMITTED OR INVALID	172	4.9		
	System	17	.5		
	Total	189	5.4		
Total		3515	100.0		

**(Table 4.29) READ\AGREE\HAPPY ABOUT BOOK AS A PRESENT**

Frequency		Percent	Valid Percent	Cumulative Percent
Valid	AGREE A LOT	2143	61.0	65.8
	AGREE A LITTLE	600	17.1	18.4
	DISAGREE A LITTLE	283	8.1	8.7
	DISAGREE A LOT	230	6.5	7.1
	Total	3256	92.6	100.0
Missing	OMITTED OR INVALID	242	6.9	
	System	17	.5	
	Total	259	7.4	
Total		3515	100.0	

**(Table 4.32) READ\AGREE\READING IS BORING**

Frequency		Percent	Valid Percent	Cumulative Percent
Valid	AGREE A LOT	754	21.5	23.4
	AGREE A LITTLE	507	14.4	15.8
	DISAGREE A LITTLE	379	10.8	11.8
	DISAGREE A LOT	1579	44.9	49.1
	Total	3219	91.6	100.0
Missing	OMITTED OR INVALID	279	7.9	
	System	17	.5	
	Total	296	8.4	
Total		3515	100.0	

**(Table 4.30) READ\AGREE\MORE TIME FOR READING**

Frequency		Percent	Valid Percent	Cumulative Percent
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Valid	AGREE A LOT	2008	57.1	61.8	61.8
	AGREE A LITTLE	701	19.9	21.6	83.4
	DISAGREE A LITTLE	303	8.6	9.3	92.7
	DISAGREE A LOT	238	6.8	7.3	100.0
	Total	3250	92.5	100.0	
Missing	OMITTED OR INVALID	248	7.1		
	System	17	.5		
	Total	265	7.5		
Total		3515	100.0		

**(Table 4.27) READ\AGREE\ENJOY READING**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	AGREE A LOT	2244	63.8	68.5	68.5
	AGREE A LITTLE	606	17.2	18.5	87.0
	DISAGREE A LITTLE	232	6.6	7.1	94.1
	DISAGREE A LOT	192	5.5	5.9	100.0
	Total	3274	93.1	100.0	
Missing	OMITTED OR INVALID	224	6.4		
	System	17	.5		
	Total	241	6.9		
Total		3515	100.0		

### Dataset & Frequencies for Tables 4.24 tot 4.53

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ASBR07A ASBR07B ASBR07C ASBR07D ASBR07D ASBR07E ASBR07F
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MODE SUM
  /HISTOGRAM
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```

### Statistics

		GEN\SEX OF STUDENT	GEN\DATE OF BIRTH\YEAR	GEN\AMOUNT OF BOOKS IN YOUR HOME	GEN\HOME POSSESS\BOOKS
N	Valid	3498	3482	3302	3457
	Missing	17	33	213	58
Mean		1.51	2.86	2.09	1.29
Std. Error of Mean		.008	.016	.021	.008
Median		2.00	3.00	2.00	1.00
Mode		2	3	1	1
Std. Deviation		.500	.945	1.191	.453
Variance		.250	.893	1.417	.205
Range		1	7	4	1
Minimum		1	1	1	1
Maximum		2	8	5	2
Sum		5273	9970	6916	4453

### Statistics

		READ\TIME SPENT READING OUTSIDE SCHOOL	READ\HOW OFTEN\READ FOR FUN	READ\HOW OFTEN\READ CHOSEN THINGS	READ\HOW OFTEN\READ STH TO LEARN
N	Valid	3343	3336	3314	3329
	Missing	172	179	201	186
Mean		1.99	1.83	1.68	1.59
Std. Error of Mean		.018	.018	.016	.016
Median		2.00	1.00	1.00	1.00
Mode		1	1	1	1
Std. Deviation		1.061	1.044	.932	.906
Variance		1.125	1.089	.869	.821
Range		3	3	3	3
Minimum		1	1	1	1
Maximum		4	4	4	4
Sum		6653	6108	5552	5285

### Statistics

		READ\HOW OFTEN\OUTSIDE SCHOOL\STORIES	READ\HOW OFTEN\OUTSIDE SCHOOL\BOOKS	READ\HOW OFTEN\OUTSIDE SCHOOL\MAGAZINES	READ\HOW OFTEN\OUTSIDE SCHOOL\COMICS
N	Valid	3325	3282	3250	3221
	Missing	190	233	265	294
Mean		2.04	1.84	1.93	2.07
Std. Error of Mean		.019	.017	.018	.020
Median		2.00	2.00	2.00	2.00
Mode		1	1	1	1
Std. Deviation		1.104	.987	1.049	1.144
Variance		1.220	.975	1.101	1.309
Range		3	3	3	3
Minimum		1	1	1	1
Maximum		4	4	4	4
Sum		6797	6027	6286	6669

### Statistics

		READ\HOW OFTEN\BORROW SCHOOL LIBRA	READ\AGREE\DO WELL IN READING	READ\AGREE\READING IS EASY	READ\AGREE\READ HARDER THAN FOR OTHERS
N	Valid	3349	3305	3264	3237
	Missing	166	210	251	278
Mean		2.06	1.48	1.48	2.66
Std. Error of Mean		.020	.013	.014	.022
Median		2.00	1.00	1.00	3.00
Mode		1	1	1	4
Std. Deviation		1.157	.762	.778	1.230
Variance		1.339	.581	.606	1.512
Range		3	3	3	3
Minimum		1	1	1	1
Maximum		4	4	4	4
Sum		6910	4885	4842	8605

### Statistics

		READ\AGREE\ INTERESTING HARD TO READ BOOK	READ\AGREE\ TROUBLE DIFFICULT WORDS	READ\AGREE\ TEACHER PRAISES FOR READING	READ\AGREE\ READ HARDER THAN OTHER THINGS
N	Valid	3251	3238	3253	3241
	Missing	264	277	262	274
Mean		1.57	2.30	1.85	2.76
Std. Error of Mean		.017	.021	.017	.022
Median		1.00	2.00	2.00	3.00
Mode		1	1	1	4
Std. Deviation		.945	1.180	.990	1.254
Variance		.893	1.394	.980	1.572
Range		3	3	3	3
Minimum		1	1	1	1
Maximum		4	4	4	4
Sum		5100	7455	6026	8959

### Statistics

		READ\AGREE\ LIKE READ THINGS MAKE THINK	READ\AGREE\ MPORTANT TO BE GOOD READER	READ\AGREE\ PARENTS LIKE WHEN I READ	READ\AGREE\ LEARN A LOT FROM READING
N	Valid	3312	3279	3250	3234
	Missing	203	236	265	281
Mean		1.34	1.29	1.30	1.37
Std. Error of Mean		.013	.012	.012	.013
Median		1.00	1.00	1.00	1.00
Mode		1	1	1	1
Std. Deviation		.729	.663	.670	.746
Variance		.532	.439	.448	.557
Range		3	3	3	3
Minimum		1	1	1	1
Maximum		4	4	4	4
Sum		4453	4234	4230	4422

### Statistics

		READVAGREE\ NEED READ WELL FOR FUTURE	READVAGREE\ BOOK HELPS IMAGE OTHER WORLDS	READVAGREE\ READ ONLY IF I HAVE TO	READVAGREE\ TALKING ABOUT WHAT I READ
N	Valid	3256	3267	3331	3326
	Missing	259	248	184	189
Mean		1.32	1.41	2.00	1.74
Std. Error of Mean		.013	.014	.020	.017
Median		1.00	1.00	2.00	1.00
Mode		1	1	1	1
Std. Deviation		.723	.808	1.180	.992
Variance		.523	.653	1.393	.983
Range		3	3	3	3
Minimum		1	1	1	1
Maximum		4	4	4	4
Sum		4284	4611	6659	5800

### Statistics

		READVAGREE\ HAPPY ABOUT BOOK AS A PRESENT	READVAGREE\ READING IS BORING	READVAGREE\ MORE TIME FOR READING	READVAGREE\ ENJOY READING
N	Valid	3256	3219	3250	3274
	Missing	259	296	265	241
Mean		1.57	2.86	1.62	1.50
Std. Error of Mean		.016	.022	.016	.015
Median		1.00	3.00	1.00	1.00
Mode		1	4	1	1
Std. Deviation		.918	1.252	.928	.862
Variance		.843	1.567	.861	.744
Range		3	3	3	3
Minimum		1	1	1	1
Maximum		4	4	4	4
Sum		5112	9221	5271	4920

### Frequency Table (Tables 4.9 tot 4.23)



**(Table 4.11) GEN\SEVERITY PROBLEM\BUILDING REPAIR**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	NOT A PROBLEM	31	27.9	30.1	30.1
	MINOR PROBLEM	34	30.6	33.0	63.1
	MODERATE PROBLEM	20	18.0	19.4	82.5
	SERIOUS PROBLEM	18	16.2	17.5	100.0
	Total	103	92.8	100.0	
Missing	OMITTED OR INVALID	1	.9		
	System	7	6.3		
	Total	8	7.2		
Total		111	100.0		

**(Table 4.12) GEN\SEVERITY PROBLEM\OVERCROWDED CLASS**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	NOT A PROBLEM	21	18.9	20.2	20.2
	MINOR PROBLEM	35	31.5	33.7	53.8
	MODERATE PROBLEM	29	26.1	27.9	81.7
	SERIOUS PROBLEM	19	17.1	18.3	100.0
	Total	104	93.7	100.0	
Missing	System	7	6.3		
Total		111	100.0		

**(Table 4.13) READ\CLASSROOM LIBRARY**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	YES	70	63.1	70.0	70.0
	NO *(IF NO, GO TO #R13)*	30	27.0	30.0	100.0
	Total	100	90.1	100.0	
Missing	OMITTED OR INVALID	2	1.8		
	System	9	8.1		
	Total	11	9.9		
Total		111	100.0		

**(Table 4.9) GEN\SEX OF TEACHER**

Frequency	Percent	Valid Percent	Cumulative Percent
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Valid	FEMALE	75	67.6	72.1	72.1
	MALE	29	26.1	27.9	100.0
	Total	104	93.7	100.0	
Missing	System	7	6.3		
Total		111	100.0		

**(Table 4.10) GENLEVEL OF FORMAL EDUCATION COMPLETED**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	<ISCED LEVEL 3>	7	6.3	6.9	6.9
	<ISCED LEVEL 4>	43	38.7	42.2	49.0
	<ISCED LEVEL 5A, 1ST>	37	33.3	36.3	85.3
	<ISCED LEVEL 5A, 2ND>	15	13.5	14.7	100.0
	Total	102	91.9	100.0	
Missing	OMITTED OR INVALID	2	1.8		
	System	7	6.3		
	Total	9	8.1		
Total		111	100.0		

**(Table 4.15) READPROPORTION OF TIME\HOURS**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	0	8	7.2	9.4	9.4
	1	15	13.5	17.6	27.1
	2	23	20.7	27.1	54.1
	3	9	8.1	10.6	64.7
	4	6	5.4	7.1	71.8
	5	11	9.9	12.9	84.7
	6	1	.9	1.2	85.9
	7	2	1.8	2.4	88.2
	8	1	.9	1.2	89.4
	9	2	1.8	2.4	91.8
	10	2	1.8	2.4	94.1
	13	1	.9	1.2	95.3
	14	1	.9	1.2	96.5
	15	3	2.7	3.5	100.0
	Total	85	76.6	100.0	

Missing	OMITTED OR INVALID	17	15.3		
	System	9	8.1		
	Total	26	23.4		
Total		111	100.0		

**(Table 4.16) READ\PROVISION FOR ADVANCED READERS**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	YES	54	48.6	58.7	58.7
	NO	38	34.2	41.3	100.0
	Total	92	82.9	100.0	
Missing	OMITTED OR INVALID	10	9.0		
	System	9	8.1		
	Total	19	17.1		
Total		111	100.0		

**(Table 4.20) READ\TYPES OF TEXT\LIT\SHORT STORIES**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	EVERY OR ALMOST EVERY DAY	15	13.5	15.6	15.6
	ONCE OR TWICE A WEEK	51	45.9	53.1	68.8
	ONCE OR TWICE A MONTH	23	20.7	24.0	92.7
	NEVER OR ALMOST NEVER	7	6.3	7.3	100.0
	Total	96	86.5	100.0	
Missing	OMITTED OR INVALID	6	5.4		
	System	9	8.1		
	Total	15	13.5		
Total		111	100.0		

**(Table 4.21) READ\TYPES OF TEXT\LIT\FICTION BOOKS**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	EVERY OR ALMOST EVERY DAY	9	8.1	9.5	9.5
	ONCE OR TWICE A WEEK	35	31.5	36.8	46.3

	ONCE OR TWICE A MONTH	25	22.5	26.3	72.6
	NEVER OR ALMOST NEVER	26	23.4	27.4	100.0
	Total	95	85.6	100.0	
Missing	OMITTED OR INVALID	7	6.3		
	System	9	8.1		
	Total	16	14.4		
Total		111	100.0		

**(Table 4.22) READ\TYPES OF TEXT\INFO\NONFICTION**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	EVERY OR ALMOST EVERY DAY	32	28.8	34.0	34.0
	ONCE OR TWICE A WEEK	31	27.9	33.0	67.0
	ONCE OR TWICE A MONTH	19	17.1	20.2	87.2
	NEVER OR ALMOST NEVER	12	10.8	12.8	100.0
	Total	94	84.7	100.0	
Missing	OMITTED OR INVALID	8	7.2		
	System	9	8.1		
	Total	17	15.3		
Total		111	100.0		

**(Table 4.23) READ\TYPES OF TEXT\INFO\LONG NONFICTION**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	EVERY OR ALMOST EVERY DAY	1	.9	1.1	1.1
	ONCE OR TWICE A WEEK	26	23.4	27.7	28.7
	ONCE OR TWICE A MONTH	32	28.8	34.0	62.8
	NEVER OR ALMOST NEVER	35	31.5	37.2	100.0
	Total	94	84.7	100.0	
Missing	OMITTED OR INVALID	8	7.2		
	System	9	8.1		

Total	17	15.3		
Total	111	100.0		

**(Table 4.17) READ\READING INSTRUCTION\CHILDRENS BOOK**

Frequency		Percent	Valid Percent	Cumulative Percent
Valid	BASIS FOR INSTRUCTION	25	22.5	26.9
	SUPPLEMENT	57	51.4	88.2
	NOT USED	11	9.9	100.0
	Total	93	83.8	100.0
Missing	OMITTED OR INVALID	9	8.1	
	System	9	8.1	
	Total	18	16.2	
Total		111	100.0	

**(Table 4.18) READ\READING INSTRUCTION\NEWSPAPER**

Frequency		Percent	Valid Percent	Cumulative Percent
Valid	BASIS FOR INSTRUCTION	13	11.7	13.4
	SUPPLEMENT	69	62.2	84.5
	NOT USED	15	13.5	100.0
	Total	97	87.4	100.0
Missing	OMITTED OR INVALID	5	4.5	
	System	9	8.1	
	Total	14	12.6	
Total		111	100.0	

**(Table 4.19) READ\READING INSTRUCTION\REF. MATERIALS**

Frequency		Percent	Valid Percent	Cumulative Percent
Valid	BASIS FOR INSTRUCTION	18	16.2	18.6
	SUPPLEMENT	71	64.0	73.2
	NOT USED	8	7.2	100.0
	Total	97	87.4	100.0
Missing	OMITTED OR INVALID	5	4.5	

	System	9	8.1		
	Total	14	12.6		
Total		111	100.0		

**(Table 4.14) READ\SEND STUDENTS TO OTHER LIBRARY**

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	AT LEAST ONCE OR TWICE A WEEK	41	36.9	43.2	43.2
	ONCE OR TWICE A MONTH	16	14.4	16.8	60.0
	A FEW TIMES A YEAR	17	15.3	17.9	77.9
	NEVER OR ALMOST NEVER	21	18.9	22.1	100.0
	Total	95	85.6	100.0	
Missing	OMITTED OR INVALID	7	6.3		
	System	9	8.1		
	Total	16	14.4		
Total		111	100.0		

## Dataset & Frequencies for Tables 4.9 tot 4.23

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  /STATISTICS=STDDEV VARIANCE RANGE MINIMUM MAXIMUM SEMEAN MEAN MEDIAN
MODE SUM
  /HISTOGRAM
  /ORDER=ANALYSIS.

```

### Statistics

		GEN\SEVERIT Y PROBLEM\BUI LDING REPAIR	GEN\SEVERIT Y PROBLEM\OV ERCROWDED CLASS	READ\CLASSR OOM LIBRARY	GEN\SEX OF TEACHER
N	Valid	103	104	100	104
	Missing	8	7	11	7
Mean		2.24	2.44	1.30	1.28
Std. Error of Mean		.105	.099	.046	.044
Median		2.00	2.00	1.00	1.00
Mode		2	2	1	1
Std. Deviation		1.071	1.013	.461	.451
Variance		1.146	1.026	.212	.203
Range		3	3	1	1
Minimum		1	1	1	1
Maximum		4	4	2	2
Sum		231	254	130	133

### Statistics

		GEN\LEVEL OF FORMAL EDUCATION COMPLETED	READ\PROPO RTION OF TIME\HOURS	READ\PROPO RTION OF TIME\MINUTES	READ\PROVISI ON FOR ADVANCED READERS
N	Valid	102	85	85	92
	Missing	9	26	26	19
Mean		4.10	3.59	13.02	1.41
Std. Error of Mean		.127	.386	1.778	.052
Median		5.00	2.00	.00	1.00
Mode		3	2	0	1
Std. Deviation		1.286	3.560	16.388	.495
Variance		1.654	12.674	268.571	.245
Range		4	15	55	1
Minimum		2	0	0	1
Maximum		6	15	55	2
Sum		418	305	1107	130

### Statistics

		READTYPES OF TEXT\LIT\SHO RT STORIES	READTYPES OF TEXT\LIT\FICTI ON BOOKS	READTYPES OF TEXT\LIT\PLAY S	READTYPES OF TEXT\LIT\OTH ER
N	Valid	96	95	95	0
	Missing	15	16	16	111
Mean		2.23	2.72	3.20	
Std. Error of Mean		.082	.100	.074	
Median		2.00	3.00	3.00	
Mode		2	2	3	
Std. Deviation		.801	.975	.723	
Variance		.642	.950	.523	
Range		3	3	2	
Minimum		1	1	2	
Maximum		4	4	4	
Sum		214	258	304	

### Statistics

		READTYPES OF TEXT\INFO\n NFICION	READTYPES OF TEXT\INFOLO NG NONFICTION	READTYPES OF TEXT\INFOAR TICLES	READ\READIN G INSTRUCTION\ CHILDRENS BOOK
N	Valid	94	94	95	93
	Missing	17	17	16	18
Mean		2.12	3.07	2.56	1.85
Std. Error of Mean		.106	.086	.083	.063
Median		2.00	3.00	3.00	2.00
Mode		1	4	3	2
Std. Deviation		1.025	.833	.808	.607
Variance		1.051	.693	.654	.368
Range		3	3	3	2
Minimum		1	1	1	1
Maximum		4	4	4	3
Sum		199	289	243	172

### Statistics



		READ\READING INSTRUCTION\ NEWSPAPER	READ\READING INSTRUCTION\ REF. MATERIALS	READ\SEND STUDENTS TO OTHER LIBRARY
N	Valid	97	97	95
	Missing	14	14	16
Mean		2.02	1.90	2.19
Std. Error of Mean		.055	.052	.125
Median		2.00	2.00	2.00
Mode		2	2	1
Std. Deviation		.540	.510	1.214
Variance		.291	.260	1.474
Range		2	2	3
Minimum		1	1	1
Maximum		3	3	4
Sum		196	184	208

## **APPENDIX B**

### **Letter of permission**



UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA

Faculty of Education  
Department: Science, Mathematics  
and Technology Education

Centre for Evaluation & Assessment

29 September 2015

Mrs JJ (Hannalie) Knoetze  
Department of Information Science  
University of South Africa (UNISA)  
Student number 53939824  
Preller Street  
Muckleneuk Ridge  
Pretoria

Email: [Knoetj@unisa.ac.za](mailto:Knoetj@unisa.ac.za)

Dear Mrs Knoetze

PERMISSION TO USE PIRLS 2011 DATA

Thank you for your email and letter dated 02 September 2015. After reviewing your request, I hereby grant you permission to use the PIRLS 2011 data set for the purposes as outlined in your letter dated 02 September 2015 and on condition that you submit a copy of your final dissertation to the Centre for Evaluation and Assessment.

Prof. S.J. Howie  
Director: Centre for Evaluation and Assessment  
Faculty of Education  
University of Pretoria



CEA (Centre for Evaluation & Assessment)  
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## APPENDIX C

### List of authors for systematic literature review

<b>Chronological list of authors</b>	<b>Alphabetical list of authors</b>
1996 Olën	Boekhorst & Britz 2004
1999 Karlsson	De Vries (2009:
2002 Hart	De Vries and Van der Merwe 2004
2002 Le Roux	Dlamini & Brown 2010
2003 Karlsson	Dubazana & Hoskins 2011
2004 Boekhorst & Britz	Du Toit 2009
2004 De Vries & Van der Merwe	Du Toit & Stilwell 2012:
2004 Hart	Equal Education 2010
2005 Hell	Evans 2014
2006 Hoskins	Fombad & Jiyane 2015
2006 Zinn	Hart 2002
2007 Hart & Zinn	Hart 2004
2007 Nassimbeni & Underwood	Hart 2014
2007 Pretorius & Mampuru	Hart & Nassimbeni 2013:
2007 Stilwell:	Hart & Zinn 2007
2008 Scheepers	Hart & Zinn 2015:

2009 Stilwell	Hell 2005
2009 Du Toit	Hoskins 2006
2009 Machet & Tiemensma	Jiyane, Fombad & Mugwisi 2016
2009 De Vries	Karlsson 1999
2010 Dlamini & Brown	Karlsson (2003
2010 Equal Education	Le Roux (2002
2011 Dubazana & Hoskins	Machet & Tiemensma 2009
2012 Du Toit & Stilwell	Mojapelo 2015
2012 Paton-Ash	Mojapelo 2016a
2013 Paton-Ash & Wilmot	Mojapelo 2016b
2013 Hart & Nassimbeni	Mojapeolo & Dube 2014a
2014 Evans	Mojapelo & Dube 2014b
2014 Hart	Mojapelo & Dube 2015
2014a Mojapeolo & Dube	Mojapelo & Dube 2017
2014b Mojapelo & Dube	Nassimbeni & Underwood 2007
2015 Hart & Zinn	Olën 1996
2015 Mojapelo	Paton-Ash 2012
2015 Mojapelo & Dube	Paton-Ash & Wilmot 2013
2015 Paton-Ash and Wilmot	Paton-Ash & Wilmot 2015
2015 Fombad & Jiyane	Pretorius & Mampuru 2007
2016 Jiyane, Fombad & Mugwisi	Scheepers 2008

2016a Mojapelo	Stilwell 2007:
2016b Mojapelo	Stilwell 2009:
2017 Mojapelo & Dube	Zinn 2006
<b>Total: 40</b>	<b>Total: 40</b>