

Chapter 1: Introduction

1.1 Introduction

Academic reading is widely regarded as a major determining factor in academic achievement. In the United States, studies by Guthrie, Wigfield, Metsala and Cox (1999), Guthrie and Wigfield (2000), Janzen (2007), and Stanovich and Cunningham (1993) have shown a consistent relationship between reading and academic achievement; good readers cope academically, while poor, unskilled readers show poor academic performance. South African studies by Cliff, Ramaboa and Pearce (2007), Pretorius (2000; 2007), Pretorius and Mampuru (2007), Scheepers (2008), and Van Wyk (2008) at primary and tertiary levels, demonstrate similar results.

Various ways of improving academic reading abilities in students have been advocated as a means to improve students' academic success, the majority of which have focused on the cognitive processing of print information (e.g. Anderson 1999; August 2006; Cipelewski & Stanovich 1992; Dreyer & Nel 2003; Shultz 2005; Worden 2005). However, a number of scholars in the field of reading research and reading pedagogy have pointed towards the important role of social and affective factors in both facilitating and hindering successful academic reading (Alderson 2000; Grabe & Stoller 2002; Greaney 1996; Guthrie & Wigfield 2000; Pretorius 2007; Verhoeven & Snow 2001; Wallace 2003). Various studies have shown that high affective levels in reading correspond with good reading ability and low affective levels relate to poor reading ability.

While not denying the importance of cognitive processing in reading, the purpose of the current study is to investigate the relationship between socio-affective factors and the academic reading abilities of first-year undergraduate students, and to devise pedagogical strategies to enhance these factors to students' advantage.

On the basis of gaps identified in socio-affective reading research and the lack of empirically based interventions at tertiary level, desiderata for research that considers socio-affective issues in reading abilities and the design of reading interventions are proposed. These in turn constitute the rationale for the research aims and the hypotheses of the present study (§ 1.8, 1.9, 1.10).

The purpose of this chapter is to explore the notion of Academic Reading and the possible reasons for students' inadequate academic reading abilities. These reasons, discussed in three subsections below, relate to problems originating from the social and cultural environment, from the current schooling system and from the demands and constraints of higher education. An overview is then given of university-level responses in South Africa and abroad, with particular reference to the University of Pretoria (henceforth UP). The aims of the research are identified and the research design for investigating socio-affective factors in academic reading, as well as designing and testing an intervention for a particular target population at the University of Pretoria, is briefly set out. In conclusion, a preview is given of the remaining chapters of the thesis.

1.2 Academic reading

Academic reading is briefly explained in this section, but the topic is examined in greater detail in the literature review in Chapter 2.

In this 21st century of information abundance and knowledge seeking, reading underlies all aspects of academic activities, and is crucially important for students. They read to gather information and acquire new knowledge; to learn for tests and examinations; to write assignments, projects, and so on. As reading is fundamental to writing (Alderson 2000; Belcher 1990:220; Butler 2007:18), and writing is the channel through which students' academic performance is assessed, students largely depend on proficient reading to succeed academically.

Reading comprises various constituents, for example, basic decoding of information as well as comprehension. It can serve various purposes, including: scanning (reading for specific information), skimming (reading to obtain an overview of text), reading for general comprehension, reading to learn, reading for pleasure, and reading to integrate and evaluate information from texts (Alderson 2000; Grabe & Stoller 2002; Pretorius 2000:15).

At tertiary level students predominantly engage in reading to learn, which goes beyond basic decoding and involves comprehension reading, as well as reading to interpret, integrate and evaluate information (also referred to as critical reading). Comprehension

reading requires students to get an overview of texts, to have a good grasp of main ideas and supporting details, to understand content and to relate main ideas to background knowledge in an appropriate way. Reading to learn involves all aspects of comprehension reading, and in addition, requires students to recognise and build rhetorical frames that organise the information in the text as well as to link the text to the reader's knowledge base using highly demanding inferencing skills. It further requires students to understand and remember content in order to learn. Critical reading on the other hand, requires students to understand and develop concepts, to distinguish between fact and opinion, to recognise author intention, to interpret texts and to evaluate information. Critical reading also involves synthesis or integration, which requires the restructuring of a rhetorical frame to accommodate information from multiple sources (Grabe & Stoller 2002:14). For effective synthesis, the reader will have to establish a more critical set of goals, remember points of comparison or opposition, assess the relative importance of the information and construct a framework in which the information will be organised (Grabe & Stoller 2002:11). This type of reading, predominant in the educational environment is also referred to as Academic Reading. Essentially, it taps into higher order reading skills and involves generalising, sequencing, hierarchical ordering, contradiction, understanding, comparisons, cause-effect relationships, doing applications, synthesising and solving problems (Anderson 1991:461).

It is necessary to distinguish between reading as mere decoding, which occurs at lower levels of processing, and reading as a reasoning activity which requires higher order skills. Merely decoding the meanings of words and sentences does not include reasoning and critical thinking. The academic reading that is required at tertiary level demands that students move beyond decoding to operate at higher levels of comprehension which involve critical and reasoning ability as outlined above. At this level, students need to operate on three reading levels (Alderson 2000:7, 8). Not only should they read the texts/lines for meaning of the printed words (decoding) but they should be able to read between the lines by inferencing and also read beyond the lines by critiquing and evaluating texts. Reading to learn and critical reading both involving the skills and abilities outlined above, constitute academic reading and are crucial for academic success (Alderson 2000; Anderson 1991; Grabe & Stoller 2002).

However, a large number of students have difficulty in operating at this higher level of reading (Cliff et al. 2007:46; Pretorius 2000:12; Yeld 2009:78). Pretorius (2000) gives an account (through case studies) of how first year psychology students have problems in accessing information effectively and meaningfully from texts. Cliff, Ramaboa and Pearce (2007) report on the poor academic literacy levels of students, which are manifested in various literacy tests. Many tertiary institutions in South Africa now require first-year students to complete an academic literacy test in order to identify students who are academically vulnerable or at risk of failure. Yeld, in her 2009 National Benchmark Test Project ¹(NBTP) report, reveals that more students fall within the basic and intermediate bands than in the proficient band. Students on the proficient level are deemed to be academically literate, whereas those on the basic and intermediate levels are identified by the test as being likely to face challenges in their academic studies. At tertiary level, these students would need academic literacy support, especially those on the basic level who would require extensive and long term support (Yeld 2009:77). Similarly, the Test for Academic Literacy Levels (henceforth abbreviated as TALL), which is used as a placement test at the University of Pretoria, shows a large number of students falling in the *At Risk* and *High Risk* groups.

The reading problems that students encounter, and the way and manner in which the problems manifest will be discussed later in the chapter. The next section discusses the possible causes of these problems. The causes or reasons that have given rise to students' reading problems range from wider socio-political situations to specific individual home and school factors.

1.3 Possible causes of inadequate academic reading abilities of university students

Many reasons have been given for students' poor academic reading habits, both in South Africa and other parts of the world. Among these reasons are adverse home circumstances, print poor environments, a poor home literacy environment (deemed the single most critical factor in reading,) e.g. Greaney (1996:13), poor literacy conditions in schools, inappropriate methods and approaches for teaching reading in general, and negative

¹ The NBTP was commissioned by Higher Education South Africa in response to the challenges of student (under)preparedness and was designed with the overarching aim of assisting higher education to increase its graduate outputs (Yeld 2009:76).

cultural influences on reading (Alderson 2000; Elley 1996; Grabe & Stoller 2002; Greaney 1996; Pretorius 2007; Pretorius & Mampuru 2007; Scheepers 2008). Administrative issues at school and national levels, such as poor school governance and poor educational policies, have also contributed to students' poor reading ability (Grabe & Stoller 2002; Pretorius 2007; 2008). These social, cultural and educational issues have adverse effects on students' reading habits and are discussed in more detail below.

1.3.1 Causes related to the social and cultural environment of the learners

Although reading has been primarily construed as a cognitive-linguistic accomplishment, it is also a socially constructed phenomenon. It is a form of human behaviour and a social practice (e.g. Street 1995). In other words, the environment, family or social community of which an individual is part influences his/her reading behaviour and reading development. The home environment and the larger community, as well as cultural practices, all have a bearing on students' ability to read proficiently.

Firstly, the home environment exerts a great influence on learners' reading ability. Homes that are print poor (that is, with few or no books) will have adverse effects on learners' reading habits. Children from print-poor homes are not consistently exposed to print material and have limited exposure to print before starting school. Usually such children are not inculcated into the habit of reading at a young age and tend not to find reading pleasurable. Consequently, at tertiary level they find reading burdensome, and do not read much. An International Association for the Evaluation of Educational Achievement (IEA) study identified the home environment as the single most critical factor in the development of literacy (Greaney 1996:13). In addition to the effect of print-poor homes, it has been contended that having parents, siblings and significant adults who do not engage in reading or do so sparingly, strongly influences the importance that students attach to reading. Both conditions are usually the result of poverty. Families of low socio-economic status (SES) usually struggle to make ends meet and as a result purchasing books is a luxury that is not considered. Such families are usually headed by low-literate parents who may neither appreciate the worth of purchasing books for children to read, nor the importance of children visiting the local library – if indeed there is one in the community. Those who may wish to take children to libraries are short-changed by financial constraints.

In South Africa libraries are also not easily within reach for many of the students living in townships or ‘locations’, which are far from social amenities. In fact, researchers have found a strong link between poverty and low SES on one hand, and poor reading habits and abilities on the other (Elley 1996; Grabe & Stoller 2002; Greaney 1996; Pretorius 2007; Pretorius & Mampuru 2007; Scheepers 2008). Children from such homes are hardly read to as children and scarcely come into contact with print during preschool and school years. Research indicates that children who are often read to and are exposed to print material at home develop pre-reading skills, such as phonemic awareness (recognising letter shapes and sounds), awareness of shapes, patterns, letters and words; sequencing, predicting and even creativity and imagination before the start of school, which assists in later reading development (Greaney 1996:19).

In their analysis of the 2006 Progress in International Reading Literacy Study (PIRLS) report, which points to South Africa as the lowest performing participant among 40 countries, Taylor and Yu (2009:75) assert that in South Africa SES plays a major role in students’ academic achievement and reading ability. They explain that SES influences reading achievement directly through the home environment and indirectly through the quality of education, as a result of the family’s socio-economic status. They state that “[t]he impact of SES on educational achievement is particularly severe in South Africa by international standards” (Taylor & Yu 2009:75).

Besides these home conditions, the influence of the social community and the effects of culture on students’ reading habits, are significant. Some communities perceive the printed word as authority not to be questioned, as the Bible was years ago. Others do very little reading for pleasure – if at all – and view reading as solely for utilitarian purposes (Carstens 2004b:19) and do not read for pleasure – an activity that greatly contributes to the development of reading proficiency. To students from such communities, where texts are not questioned and where texts serve utilitarian purposes, critiquing and evaluating texts is a completely unfamiliar exercise. In other communities individuals’ frequent immersion in a book may be frowned upon and is said to encourage laziness. In one rural

community the practice of an individual sitting alone absorbed in a book is viewed suspiciously and associated with witchcraft ²(Pretorius 2009).

These conditions lead to limited exposure to print material, few opportunities to read, and hence not developing good decoding skills that influence reading speed (Carstens 2004a:463), resulting in incorrect and inappropriate use of strategies, limited vocabulary, limited and poor use of background knowledge, and lack of metacognition. Consequently, this results in poor reading comprehension, which affects learning and academic achievement.

1.3.2 Causes related to primary and secondary education in South Africa

Reading problems that become prominent at tertiary level are said to be rooted in primary and high school education (Pretorius 2007:104). A 1992 study by the IEA showed that students in participating developing countries (countries with high illiteracy and high poverty levels) performed below the expected performance levels (Elley 1996). This finding points to the low literacy levels of a number of students in primary schools in developing countries, mostly in Africa. The situation has not changed much in the intervening twenty years. African countries that participated in the 2006 PIRLS performed the worst out of forty countries (Taylor & Yu 2009; Van Staden & Howie 2010).

In South Africa the reading situation is compounded by the schooling crisis, evidenced by the poor educational environment at primary and secondary levels. At primary and secondary levels a considerable number of students do not receive appropriate and adequate reading instruction (Pretorius & Mampuru 2007; Venter & Howie 2008). This has been attributed to unqualified teachers, poor teaching methods and inadequate instructional materials, among others (Van Staden & Howie 2010). Children passing through the school system have shown very low reading and numeracy proficiency levels. These students display poor comprehension of texts and inadequate knowledge of grammatical structures, which hinders comprehension (Ayliff 2012; Lemmer & Manyike

² Anecdotal evidence relayed to Lilli Pretorius by postgraduate students in rural Limpopo province.

2012). The Department of Education's systemic evaluations in 2005 showed poor performance in Grades 3 and 6 pupils' reading. Pretorius (2007:107) reports that the Department of Education's (2005) systemic assessment of reading and writing in Grade 6 showed a national mean of 38% in the language of learning and teaching. Sixty-three percent of the learners, she reports, were found to be performing in the 'Not Achieved' band. She states categorically that the results indicate low literacy accomplishments (Pretorius 2007:107). The Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ) also indicated that children from Grades 1 to 6 were reading two grades below their own level (Murimba 2005), and the PIRLS 2006 study of Grades 4 and 5 revealed South Africa in the last position out of forty participating countries (Venter & Howie 2008). These results have been attributed to the following factors: poor instructional methods at primary levels that focus on skills, with little attention to meaning, comprehension and enjoyment; emphasis on decoding skills which are often in oral chorus and poorly taught at primary levels; poorly resourced classrooms; non-existent or poorly resourced school libraries; little or no emphasis on reading in schools; lack of encouragement of risk-taking and questioning of information (important factors in reading development); and the erroneous assumption that at the end of the Foundation Phase (i.e. Grades 1 – 3), students are capable of reading to learn and do not need instruction in reading (Currin & Pretorius 2010; Zimmerman & Long 2008).

In South Africa a bimodal system of education has emerged. That is, there are two separate distributions in literacy performance that correspond to two differently functioning parts of the school system (Taylor & Yu 2009). This has created a concentration of poor learners in poorly performing schools, and this further aggravates students' reading challenges. As pointed out by Taylor and Yu (2009:67), studies have shown that a socio-economic mix of peers is an important school resource for achievement.

For many students from impoverished socio-cultural backgrounds the school is the only means of literacy development. When this educational environment fails them, which is evident from the research quoted (Murimba 2005; Pretorius 2007; Venter & Howie 2008), they remain seriously handicapped in reading development and educational achievement.

1.3.3 Demands and constraints of the tertiary education sector

The changing socio-political situation at tertiary level is no consolation either. The recently reduced funding of universities as a result of throughput rate funding instead of the previous funding according to intake system, as well as the merging of universities and technikons, have given rise to various logistical problems. For example, the funding policy has led to a number of universities facing financial crises, and the mergers have led to institutional and curriculum challenges. In addition, the poor reliability of matriculation results to predict university success (Cliff et al. 2007:34; Yeld 2009:78), and the newly introduced school leaving qualification which is still to be tested, all contribute towards the challenges relating to students' reading abilities or proficiency at tertiary level. This consequently poses numerous challenges for teachers of academic literacy.

At tertiary level, the main academic operations of students are reading and writing, with reading being fundamental to writing, and influencing writing to a large extent. At this level, students are required to read to understand concepts (with or without prior knowledge), make inferences from context, perceive relationships between parts of texts, apply relevant information to new situations, and be able to synthesise information. Students are also required to synthesise, integrate and evaluate the texts they read. In addition, students are required to read large quantities of printed materials, usually involving large volumes of academic texts, and to do so within limited timeframes. They are also expected to read and understand high-density and abstract texts comprising mostly specialized disciplinary vocabulary.

However, a large number of students in many of South Africa's tertiary institutions lack reading comprehension abilities necessary for academic reading. As a result of the poor reading background from primary and high schools, these students encounter considerable problems in dealing with academic reading demands. They struggle to meet the reading requirements, cannot make meaning from texts, and are what Alderson (2000) refers to as 'poor readers'. Such students have low reading speed; have difficulty in extracting main ideas and supporting details from texts; struggle with paraphrasing and summarizing; use coping strategies such as translation, plagiarism, and memorization; and generally find reading laborious and opt for short-cut strategies such as doing as little reading as possible or only reading the summary sections of texts. These reading difficulties ultimately translate into poor writing. As writing is the main means of assessing students' academic

performance, these poor readers become low achievers, take longer to complete their education or obtain a degree, and a number even abandon their academic pursuits due to consistent failure. This is evident in the low graduation rates in South African Universities. In South Africa, the graduation rate is 15%, one of the lowest in the world (DoE 2001; Letseka & Maile 2008).

1.4 Evidence of poor reading ability

As may be evident in other South African institutions, a number of first-year students at the University of Pretoria who enrol for first-year courses in the Unit for Academic Literacy (UAL) demonstrate the reading deficiencies mentioned above and display inappropriate use of strategies. The TALL is used to identify students deemed to be *At Risk*, in order to be given academic literacy support by the Unit. Almost a third of them fall into the *At Risk* and *High Risk* categories. In 2010 and 2011 the TALL assessments, which are highly dependent on reading proficiency (Weideman 2007), showed that of 5,060 students who wrote the English test (TALL) in 2010, 1,647 (31%) were deemed to be *At Risk* or at *High Risk* of failure, and of the 4,977 who wrote in 2011, 1,559 (32%) were categorised as *At Risk* or *High Risk* (UAL unpublished results). In both 2010 and 2011, 51% and 57% respectively, were deemed to be at *Low Risk*, with only 18% (2010) and 11% (2011) categorised as having negligible or no risk. Table 1.1 gives an overview of students' performance on TALL for 2010 and 2011.

Table 1.1: Categorisation of students' performance in the TALL FOR 2010 and 2011

	2010	2011
Total number of students who wrote the TALL	5,060	4,997
At Risk and High Risk	1,647 (31%)	1,559 (32%)
Low Risk	2,580 (51%)	2,848 (57%)
No or negligible Risk	910 (18%)	549 (11%)

The figures are higher when the results of the Afrikaans version of the test (TAG) are included. Based on communication with fellow lecturers, it is evident that a large number of these first-year students have low reading speed; are vocalised and subvocalised readers (i.e. they mouthe words or sound out words as they read); struggle with paraphrasing; have difficulty in reconstructing authors' ideas, making inferences, and extracting main and supporting ideas. They also struggle with connective devices such as anaphoric

referencing, substitution and discourse markers, let alone the synthesising and evaluation of texts that are frequently required at this level. These reading problems translate into writing problems, with students exhibiting poor writing skills that contribute to low performance and failure.

Many of these students can be termed non-traditional (August 2006). In other words, they have little or no reading background in their first language (L1) and/or have poor reading background in the second language (L2), which is the language of learning and teaching (LoLT). A number of these students are also from poor SES backgrounds, have had poor education and are from homes with no reading culture (Boakye 2007; Pretorius 2000). These characteristics have also been reported by Greaney (1996) and Pretorius (2007) at primary school level. Thus, the challenges are evident at primary school level and continue through to tertiary level. These adverse conditions are known to have a negative influence on students' love and desire for reading, which limits their exposure to texts and consequently prevent them from developing the efficiencies in reading that will make them proficient readers (Elley 1996; Grabe & Stoller 2002; Greaney 1996; Pretorius 2007).

1.5 Responses to the problem of students' inadequate academic reading abilities

As a result of the above-mentioned problems the need to find efficacious ways to improve students' reading abilities has become an educational priority. Dreyer and Nel (2003:350), in discussing the reading challenges that tertiary students face and the solutions that need to be put in place, state that

[I]n order to meet the reading demands of students within the 21st century, educators [and researchers] are pressed to *develop effective instructional means* [my emphasis] for teaching reading comprehension and reading strategy use.

1.5.1 Intervention programmes

Due to the poor reading skills and comprehension abilities that students display from primary to tertiary levels, various attempts have been made at improving their reading comprehension abilities, especially academic reading at tertiary level. At South African institutions various intervention and support programmes have been introduced to assist students to succeed academically. These include academic literacy and language proficiency programmes, such as the English Academic Language course at the University

of the Free State; the English for Professional Purposes course at the University of the North-West; and the English for Academic Purposes course at Walter Sisulu University, to mention a few. These interventions and support programmes, among many others, report to have achieved a degree of success (Dreyer & Nel 2003; Van Wyk 2008). For example: Dreyer and Nel (2003) report that they observed improvement in the use of strategies of *At Risk* students at tertiary level after the teaching of reading strategies and reading comprehension within a technology-enhanced learning environment. Van Wyk (2008) also reports improvement in tertiary students' reading comprehension test marks after the English Academic Language course comprising extensive reading, intensive reading and vocabulary study. At UP, students on the Academic Reading programme have, through self-report, stated better application of reading strategies after increased awareness of the use of reading strategies (students provided the information in answer to a reflective question for an assignment).

At the University of Pretoria a curricular reading intervention programme is housed in the Unit for Academic Literacy. The intervention programme of the Unit is aimed at improving students' academic literacy to enable them to cope with academic demands. Students who are assigned to this programme are identified by TALL to be at risk or at high risk academically, due to their low academic English proficiency level. They are required to take two semester modules in Academic Literacy, EOT 110 and EOT 120, in order to minimize the risk of failure. On the other hand, students who are identified by the test not to be at risk or to have low risk, academically, are exempted from these modules. A large number of the *Low/No Risk* students voluntarily register for other language electives offered by the Unit to meet the language requirements of their various faculties. These courses, which are aimed at improving specific academic and professional skills, are: Academic Reading (EOT 161), Academic Writing (EOT 162), Legal Discourse (EOT 163) and Communication in Organizations (EOT 164). However, even on these courses aimed at *Low Risk* learners, the reading comprehension abilities and the overall academic reading skills of a number of students are found wanting, and effective means of improving their academic reading skills are required.

1.5.2 Limitations of previous and current reading intervention programmes

Many intervention and support programmes worldwide, from primary to tertiary level, including those outlined above, are focused mainly on cognitive and linguistic aspects in

improving students' reading abilities, for example: vocabulary acquisition (Anderson 1996; Scheepers 2008), strategy training (Anderson 1999; Dreyer & Nel 2003; Elley 1996; Worden 2005), extensive reading (Stanovich & Cunningham 1993) and metacognition (Academic Reading support at UP, Pretorius, Van Dyk & Boakye 2009). Other interventions have focused on text structure, discourse organisation, and speed reading, among others (Chard, Vaugh & Tyler 2002; Meyer & Ray 2011; Williams 2003, 2007).

However, these programmes, as well as many others reported on in research studies, are limited in that they usually focus on a restricted number of isolated features of students' reading abilities (Bouhey 2006). Reading, as will be expounded in Chapter 2, is a complex process requiring the integration of linguistic, cognitive, metacognitive and affective factors. In addition, the majority of these studies and intervention programmes have focused only on the linguistic and cognitive aspects of reading, including speed reading, syntactic parsing, summarizing, vocabulary exercises, strategy instruction and hours of extensive reading (e.g. Anderson 1999; Dreyer & Nel 2003; Elley 2000; Rasinski, Blachowitz & Lems 2006; Stanovich & Cunningham 1993; Wagner, Muse & Tannenbaum 2007). Such cognitive exercises aimed at improving reading abilities are useful but limited. An adequate programme for improving reading abilities should be holistic and encompass both cognitive and socio-affective aspects.

1.6 Desiderata for holistic interventions

The limited successes of the above research studies and interventions could, I believe, be improved upon. Higher and more widespread gains across the target student population could be obtained if an integrated approach were adopted. An integrated approach to reading is an approach that encompasses the **cognitive**, the **social** and the **affective**. An integrated approach to teaching reading should comprise the teaching of cognitive and metacognitive strategies through a socio-affective approach. Affective factors, such as motivation and interest, have been identified by many current researchers as important aspects of reading development (Grabe & Stoller 2002; Guthrie & Wigfield 2000; Verhoeven & Snow 2001). Also, the fact that reading motivation declines as children move up the educational ladder (Gallik 1999; Guthrie & Wigfield 2000), makes motivation an important point of focus in improving reading abilities at higher educational levels. Besides, students at tertiary level have limited time and cannot afford to engage in the

training of one aspect of reading at a time, as may be undertaken in the intervention programmes cited above. An integrated approach is believed to confront the situation holistically, hopefully leading to optimal gains.

Given the importance of socio-affective factors in reading development, a pilot study was conducted at UP as a preface to the current study, to shed more light on students' reading background. The pilot study, using a questionnaire adapted from Grabe and Stoller (2002), was conducted on students' reading background in relation to socio-affective factors, in 2007. The findings showed that in general, first-year students on the Academic Reading course tend to have had limited exposure to texts. In other words, these students are infrequent readers with a poor reading history related to home and formal schooling, and display low engagement with texts. In more detail, the English additional language students, most of them non-traditional students, display an impoverished literacy background and prefer to read shorter texts (magazines and newspapers) in their free time than English first language (L1) students. Furthermore, English L1 students read books (novels) more often, read across genres and on different topics, whereas most additional language speakers limit their readings to topics of their interest. Research in the USA has shown that fluent readers who are also engaged readers read across genres and topics, and have a devotion to reading that spans across time (Guthrie & Wigfield 2000:404).

The 2007 UP study further showed that the additional language group consisted of students with varying skills and competency levels, as well as differing attitudes towards and motivation for reading. This finding is in line with Cliff et al.'s (2007:34) assertion that the trends towards greater diversity of educational background and experience in student intake has resulted in higher education institutions admitting students of differing academic (and presumably also socio-affective) levels. They add that there is a need for Higher Education Institutions (HEIs) to be responsive to the educational backgrounds of students in a 'learning and teaching' sense (Ibid). It therefore seems necessary that an attempt at improving students' reading abilities should, in addition to instruction, develop their desire, love for and interest in reading. It should also consider the different competencies and the varying affective levels of these students. In other words, the affective issues cannot be ignored in attempts at improving students' academic reading abilities. According to Ehrlich, Kurtz-Costes and Loridant (1993:365) motivational variables, such as self-perceived competence (self-efficacy), emerge as influential factors

determining reading performance. Grabe and Stoller (2002:56) point out that students' reading abilities are largely influenced by socio-affective factors. Alderson (2000:25) takes this point even further, and includes cultural differences as influencing reading abilities. However, as stated above, these dimensions are still largely unresearched (Bernhardt 2005), and will be discussed in greater detail in the literature review in Chapters 2 and 3.

1.7 Gaps in existing research

Socio-affective factors, though recognised as being significant in reading development, have received little attention in reading research (Grabe & Stoller 2002; Guthrie & Wigfield 2000). Although research on affective factors such as motivation, interest, attitudes and self-efficacy has received attention, the role of these factors in reading research has been under-researched. Yet, as Guthrie & Wigfield (2000:403) point out, readers are decision makers whose affects as well as their language and cognition play a role in their reading practices. They argue that people read not only because they have the ability but also because they are motivated to do so. Furthermore, the few researched experimental intervention programmes on reading that focus on socio-affective factors have been focused mainly on learners in primary and secondary schools, and those that have been conducted at tertiary level deal with first language (L1) students. In addition, research has not been seriously pursued in multilingual tertiary contexts, such as UP, even though socio-affective factors may be more pronounced in contexts accommodating large numbers of non-traditional, second language (L2) users of English (August 2006). The current research therefore differs from other research studies in higher education which use mainly cognitive-oriented approaches. This study is novel in that it uses a cognitive foundation that is embedded in a socio-affective approach, adopted from Guthrie and Wigfield's (2000) affect-oriented model (cf. § 3.4 for a more detailed discussion).

1.8 Methodology

This section provides a brief discussion of the research methodology, including the research questions, aims and objectives, hypotheses and the research design.

1.8.1 Research questions

In relation to the issues discussed above, four research questions were formulated for the purpose of this study.

1. Is there a significant relationship between socio-affective factors and students' academic reading abilities?
2. Which socio-affective factors best predict tertiary students' academic reading abilities?
3. How can knowledge of socio-affective factors be used to design a more effective reading intervention?
4. Is a reading intervention programme that integrates socio-affective factors effective, and if so, how effective is it?

1.8.2 Aims of the present study

The aim of the research project on which I report in this thesis was to explore a socio-affective approach to improving reading proficiency of first-year students at UP. The main objectives are to:

1. explore the relationship between socio-affective factors and the academic reading ability of the target group;
2. identify the socio-affective factors that best predict these students' academic reading ability;
3. design and implement an intervention programme to improve the reading skills/abilities of students by focusing on socio-affective issues in particular;
4. evaluate the effectiveness/efficacy of the intervention.

1.8.3 Hypotheses

Research questions 1 and 4 can be formulated as testable hypotheses:

Hypothesis 1: There is a significant relationship between socio-affective factors and students' academic reading ability.

Hypothesis 2: There is a significant difference in affective levels between students who participated in an intervention reading programme that incorporated socio-affective factors, compared to those who did not.

The main hypothesis of the study (Hypothesis 2) relates to Question 4: that a reading intervention programme which incorporates socio-affective factors, and actively addresses these issues in reading instruction, will lead to higher socio-affective levels in reading and

provide higher reading achievements than one that does not, and should enable students to improve their academic performance.

The remaining questions: Questions 2 and 3 are exploratory research questions.

1.8.4 Research design and procedure

The research design and research procedure used for the study are briefly discussed in this section, with a detailed discussion following in Chapter 4.

1.8.4.1 Research design

A mixed methods design was used for the research project. The main method of analysis was quantitative, with a qualitative dimension added to gain greater insight. This type of mixed methods design can be characterised as a QUANqual design (Ivankova and Creswell 2009:138). According to Ivankova and Creswell (2009) a mixed methods approach allows for a more complete understanding of the research problem, and gives the researcher an opportunity to obtain an overall picture and greater insights into the issue under investigation. The design allowed the findings of the primarily quantitative data (questionnaires) to be probed in more depth, using a qualitative approach via interviews. The results of the two analyses were then related to each other for drawing conclusions.

1.8.4.2 Research procedure

The study was organised in four phases:

Phase 1: Obtaining and analysing data pertaining to socio-affective factors and reading abilities, using a socio-affective questionnaire and the TALL results to answer Research questions 1 and 2;

Phase 2: Using the results from phase 1 to design an intervention programme in answer to Question 3;

Phase 3: Implementing the intervention programme, which entails quantitative analysis of questionnaire data and qualitative analysis from interviews (Question 4);

Phase 4: Evaluating and drawing conclusions from the results of the quantitative and the qualitative research, first separately and in relation to each other in answer to Question 4.

1.8.4.2.1 Phase 1: Pre-intervention phase of research (questions 1 & 2)

In this exploratory phase of the study, a questionnaire comprising three sections was completed by more than 1000 first-year students. The first two sections were to identify salient social and affective aspects pertaining to students' reading proficiency, while the third section was to elicit students' use of reading strategies.

In order to examine the relationship between socio-affective factors and reading proficiency, a two-way ANOVA test was used to analyse the results of the socio-affective reading questionnaire and students' performance in TALL. In order to identify salient socio-affective factors that best and strongly predict students' reading ability, a Cumulative Logit (regression) analysis was performed, using the socio-affective reading questionnaire results and students' performance in TALL.

1.8.4.2.2 Phase 2: Designing and administering the intervention (question 3)

Phase 2 was largely dependent on phase 1. Based on the survey results from the questionnaire on socio-affective factors and the theories expounded in the literature review, a socio-affective reading intervention programme was designed, and then implemented over a period of 14 weeks for the *High/At Risk* group and 7 weeks for the *Low Risk* group.

1.8.4.2.3 Phase 3: Pre- and post-intervention and cross-intervention analyses (question 4)

In order to determine the effectiveness of the intervention programme, quantitative analyses of pre and post-intervention questionnaire responses from both intervention and control classes were done, using t-tests. Paired t-tests were used to compare for differences within groups. Specifically, students' responses before and after the intervention were compared to see if results changed after the intervention, and whether the change was statistically significant. Independent t-tests were applied to test for differences between groups. In other words, the tests compared the improvement of intervention and control classes to see if there were differences between the groups. Academic reading tests were also written before and after the intervention, but for reasons to be expounded in Chapter 4, the results were not used for comparison.

In order to gain more insight into the relationship between socio-affective factors and reading proficiency levels, and to determine the efficacy of the intervention non-

statistically, interviews were conducted with selected students from the intervention classes, and the responses were analysed qualitatively.

1.8.4.2.4 Phase 4: Evaluation and integration of analysis

As the study used a mixed methods design (Ivankova & Creswell 2009; Teddlie & Tashakkori 2003), the results of the intervention were analysed, first quantitatively and then qualitatively. The quantitative analysis was conducted to determine the efficacy of the intervention in raising affective levels in reading. Thereafter, qualitative analyses using interview responses on the teaching techniques were done. The results of the two analyses were then related to each other for drawing conclusions.

The materials, sampling, respondents, methods of data collection and analysis, as well as ethical issues, are elaborately discussed in Chapter 4.

1.9 Conclusion

This chapter has briefly outlined the concept of academic reading as comprising reading to learn (highly dependent on comprehension reading) and critical reading (which involves reasoning, integration, interpretation and evaluation). The research problem of students' inadequate academic reading abilities was stated, and followed by a discussion of the possible reasons for the identified reading inadequacies. In addition, an overview of the attempts at redressing students' reading problems, both internationally and nationally, has been given with particular reference to the University of Pretoria. Based on the fact that socio-affective factors are important in students' reading proficiency, desiderata for research, which incorporates socio-affective issues in improving reading abilities and the design of reading interventions, have been proposed. Finally, the chapter has outlined the research aims, hypotheses, appropriate methodology, and the specific research problem of investigating socio-affective factors in academic reading as well as designing and testing an intervention that incorporates socio-affective factors.

1.10 Structure of the thesis

The literature review spans Chapters 2 and 3. **Chapter 2** discusses relevant theories of reading in relation to reading proficiency, whereas **Chapter 3** identifies and discusses a number of social and affective factors influencing reading proficiency. The outcomes led

to the construction of an appropriate questionnaire for eliciting information on students' reading background, social and affective reading behaviour, as well as the strategies they employ in reading. This chapter further discusses Guthrie and Wigfield's (2000) engagement model and framework, and finally presents an adapted model for tertiary reading instruction in the South African context. **Chapter 4** provides detailed information on the research methodology, while **Chapter 5** discusses the survey results of phase 1 of the empirical research to determine the relationship between socio-affective factors and students' reading ability. Based on this exploratory survey that identifies salient socio-affective factors in students' reading, a reading intervention using a socio-affective approach is presented in **Chapter 6**. **Chapter 7** reports on the quantitative analysis of students' evaluation of the intervention, while **Chapter 8** reports on the analysis of students' qualitative evaluation of the intervention. **Chapter 9** integrates the results from quantitative and qualitative analyses for corroboration and differences, and **Chapter 10** concludes the thesis by evaluating the extent to which the research questions have been answered, as well as outlining the limitations of the study.

Chapter 2: Theories of reading and reading comprehension ability

2.1 Introduction

The previous chapter gave a characterisation of academic reading and identified the skills required to engage in this type of reading as required at tertiary level. The reading problems that students face while attempting to operate at this level of reading were also identified, and a number of contributing factors to the problems were discussed. The state of the academic reading levels of first-year University of Pretoria students was also discussed. In addition, the chapter introduced the specific research problem to be investigated in this study.

This chapter focuses first on discussing the importance of academic reading, then providing an account of the relevant literature on reading theories and their relation to reading development. The purpose of the review is to provide a theoretical context within which the reading process and its relationship to reading development are explained.

2.2 Importance of academic reading

The main academic activity for students in tertiary education is the processing of information, mainly through reading and producing academic information in appropriate and relevant ways for assessment. To this end, academic reading and writing abilities are central to students' academic performance. However, reading is the more fundamental of the two and is said to be at the heart of academic success (Belcher 1990:220; Gallik 1990:480; Pretorius, 2000, 2002). Thus the centrality of reading in academic performance is echoed by a number of reading researchers. Niven (2005:778) quotes Baijnath's (1992) assertion on the issue:

[W]ith unsuccessful writers there is a poverty of input at the reading stage [...] This results in the development of inadequate text worlds, lacking the richness of understanding and insight that is necessary to deliver a competent piece of writing [...] Consequently, the [poor] quality of the product is determined at this stage. Students' academic writing is therefore preceded by their academic reading of texts, which determines the depth and quality of their writing.

The importance of reading as a phenomenon worthy of study has given rise to extensive research into this area. Researchers have proposed various theories with the aim of gaining a better understanding of the reading process while assessing the difficulties that students encounter in reading, and devising various ways to address these reading problems. In the section that follows a number of reading theories will be reviewed and their significance in addressing students' reading problems will be discussed.

2.3 Reading theories

Various reading theories have attempted to explain the reading process and account for successful reading ability, or the lack thereof, in relation to the beliefs of the reigning paradigm: The cognitive theory of reading explained reading purely as a mental process; in the 1980s reading was explained as a social activity that involved other external factors; during the humanistic era of the 1990s reading was explained in terms of affective or response theories; whereas current theories on metacognition and New Literacy Studies focus on the use of strategies and socio-cultural practices, respectively. The different theories and views on reading are briefly discussed below.

2.3.1 Cognitive views of reading

Reading was perceived primarily as a cognitive activity for most part of the 20th century (1950 – 1985). Theories of Behaviourism and Cognitivism during this era influenced reading theories and reading instruction (cf § 2.3.1.1 and § 2.3.1.2). Predominant theories of reading that emerged within this era include bottom-up as well as top-down approaches.

2.3.1.1 Bottom-up approaches

Bottom-up approaches, predominant from about 1950 to 1965 (Alexander & Fox 2008), emphasise skills and explain reading as decoding of individual sounds to derive the meaning of words. This approach is typically associated with Behaviourism and with 'phonics' approaches to the teaching of reading (Alderson 2000:17; Alexander & Fox 2008; McLaughlin 2008). It describes the word by word, sentence by sentence patterning of the text by the reader to create meaning. The bottom-up theory rests on the central notion that reading is basically a matter of decoding a series of written symbols into their aural equivalents; translating from one symbolic representation (letters/graphemes) to another (sounds/phonemes) to derive meaning (Nunan 1991:64). The perception attached

to this approach is that once a reader has gone through the processing steps and mastered the various skills, meaning would be obtained. Alderson (2000:16) states that the bottom-up approach posits that the “reader begins with the printed word, recognises graphic stimuli, decodes them to sound, recognises words and decodes meaning”.

The text is the most critical feature in this understanding of reading, and readers are perceived to be passive recipients of information in a text (Urquhart & Weir 1998). Notable in this cognitive, bottom-up approach is LaBerge and Samuels’ (1974) Shared Capacity Theory. In accordance with the views of this approach to reading, LaBerge and Samuels’ theory explains how information is sent to the brain for processing, and explains that reading fluency is obtained mainly through automaticity in decoding. This has implications for memory and attentional capacity. If too much cognitive energy and processing time is taken up decoding words, there is too little memory and attentional capacity for comprehension. Automaticity frees up the mind so that attention can then be given to comprehension. Automaticity only develops through practice – hours and hours of reading. Reading is perceived as an individual, skill-oriented, cognitive activity in which certain processing steps are followed. In other words reading is perceived solely as an intrapersonal, problem-solving task that takes place inside the brain. Cambourne’s (1979) illustration of the step by step processes involved is presented by Nunan (1991:64) as below:

Print → Every letter discriminated → phonemes and graphemes matched → Blending → Pronunciation → Meaning

According to this model the reader processes each letter or grapheme individually and matches letters with the phonemes (units of sound) of the language. The phonemes and the graphemes are blended to form words in order to derive meaning. Meaning is derived by translating one form of symbolic representation to another: from letter to sound and then to meaning (Nunan 1991:64; Urquhart & Weir 1998:40).

The underlying assumption of the phonics approach is that once a reader has blended the sounds together to form a word, that word will then be recognised and its meaning obtained. It is therefore assumed that the reader already possesses an oral vocabulary (in the language of the text) which is extensive enough to allow decoding to proceed. This assumption cannot be made with regards to many L2 learners who begin reading

instruction simultaneously with learning the L2. Also, with students from poor socio-economic backgrounds and print-poor home environments, the sounds may be as foreign as the letters they see. In addition, some children are able to decode print, as explained by the model, without actually extracting meaning from the text. Casper et al. (1998) report of second grade students who were strong readers phonemically but were unable to demonstrate comprehension. This points to the inadequacy of the bottom-up explanation of reading, although it does account for part of the process.

As much as decoding is fundamental, and therefore important in reading, fluent reading for meaningful comprehension does not occur solely in this manner (Grabe & Stoller 2002:33). Yet, many teachers are mainly influenced in their teaching by this approach to reading. This may also explain why many students become vocalised and subvocalised readers. They are only able to achieve meaning through sound. Niven's (2005:782) study indicated that early reading at a number of rural schools in the Eastern Cape province of South Africa was associated with memorisation and recitation. Reading was taught by means of rote-learning and drills. This form of teaching influences students' understanding of reading. They perceive reading primarily as decoding rather than as comprehension. Niven (2005:782) states that they become sound-centred readers instead of meaning-centred. Such students, she adds, "have an excessive reliance on the graphophonic cueing system as a way of comprehending texts, which ironically results in quite poor comprehension" (Ibid).

As argued by Brunfaut (2008:7) the bottom-up approach does not cover the full picture of the reading process. Rumelhart (1985) criticised the bottom-up approach to reading by reporting on research projects that indicate that letters are often perceived in clusters and word perception is sometimes influenced by meaning. Although Nunan (1991:77; 78) identifies a number of strategies used by good readers, which may be taught to poor readers, a sole reliance on the teaching of skills, as suggested by bottom-up processes, would not alleviate the reading problem. Also, based on the results of his study, Elley (1996) argues that voluntary pleasure reading rather than L2 reading instruction based on skills and drills was a better promoter of reading proficiency.

2.3.1.2 Top-down approach

In view of the inadequacies of the bottom-up approach, the top-down approach to reading became predominant between 1966 and 1975 (Alexander & Fox 2008). Goodman (1971; 1976) and Smith (1971; 1973; 1978), cited by a number of reading researchers (Alderson 2000:14; Alexander & Fox 2008; Anderson 1991; Grabe & Stoller 2002; McLaughlin 2008), were strong proponents of this approach to reading. Proposed as an alternative approach, the top-down model posits that reading proceeds through the processing of larger units of language. The reader rather than the text is at the heart of the reading process. In other words, the focus is on the knowledge a reader possesses. The model explains that readers bring other knowledge sources into the reading process. Rather than perceiving readers as passive decoders of meaning, as in the bottom-up explanation, readers are seen as reconstructing meaning from text. The interaction of the reader and the text is central to the reading process. The reader interacts with the text by forming hypotheses and making predictions. Instead of decoding words, the reader uses goals and expectations to derive meanings from text. The reader formulates hypotheses, and confirms expectations based on background knowledge. Goodman (1971) as reported in Alderson (2000:17) referred to reading as a Psycholinguistic Guessing Game in which the reader guesses or predicts the text's meaning on the basis of textual information and existing background knowledge (Alderson 2000:17). The more predictable a text is in terms of background knowledge, the easier the text can be processed.

The emphasis of the top-down model is on the construction of meaning. In order for the reader to achieve comprehension, he/she has to reconstruct and reorganise a text mentally, linking new information to that already stored in memory, and forming new coherent mental pictures. The reader interacts with the text by bringing his/her background knowledge of the subject, as well as knowledge of and expectations about how language works to the content of the text (Grabe & Stoller 2002:8; Nunan 1991:66). Using relevant existing schemata (networks of information stored in the brain, which act as filters for incoming information) readers map incoming information onto existing information. To the extent that these schemata are relevant, reading is successful (Alderson 2000:17; Rumelhart 1985).

During the top-down era Schema Theory was used to explain how background knowledge guides comprehension processes. According to Nunan (1991:68) Schema Theory suggests

that the knowledge we carry around in our heads is organised into interrelated patterns, which are constructed from our previous experiences of the experiential world, and this guides us as we make sense of new experiences and enables us to make predictions about what we might expect to experience in a given context. Without the appropriate schemata, comprehension will be difficult and may result in wrong interpretations and poor inferencing. Wilson and Anderson (1986:33) also provide an explanation of how the reader's existing knowledge affects comprehension. They state that "a reader comprehends a message when she is able to activate or construct a schema that gives a good account of the objects and events described" (Wilson & Anderson 1986:34).

In the top-down approach and its related Schema Theory, the link between linguistic forms and knowledge of the world is foremost in explaining the reading process. The more predictable a sequence of linguistic elements, and the more familiar the subject matter or the contents of the text, the more readily the text will be processed. In fact, it has been found that familiarity can overcome text difficulty (Alderson 2000:17). Nunan (1991:69) shows the effect of background knowledge when reporting on a 1985 study undertaken to test whether background knowledge affected readers' perception of textual relationships. He used two groups of L2 speakers, with one group having had a longer exposure to the L2. Nunan (1991:70) found familiarity to be more important than text density in achieving comprehension, for both groups. Specifically, he found that his subjects perceived textual relationships to be significantly easier in the familiar, but syntactically more difficult, passage, although the group with longer exposure performed better than the group with less exposure to the L2. He concluded that

schema theory suggests that reading involves more than utilising linguistic and decoding skills, [...] and that background knowledge was a more significant factor than grammatical complexity in determining the subjects' comprehension of the relationships in question (Ibid).

In other words, readers find grammatically complex texts more comprehensible if they are familiar with the subject matter/contents, or if they can apply appropriate schemata. In this view reading skills do not depend solely on knowledge of the linguistic elements that make up the text. Rather, reading is a dynamic process in which the text elements interact with other factors outside the texts to produce meaning. These outside factors are important and determine or influence comprehension. Comprehension breakdown may therefore result from inadequate or a lack of background knowledge.

However, the top-down approach and its related Schema Theory lay strong emphasis on background knowledge to the exclusion of decoding skills. Goodman's Psycholinguistic Guessing Game, which is a classic example of a top-down model, has been greatly criticized (Gough & Wren 1999; Pressley 1998; Stanovich & Stanovich 1999). Contrary to Goodman's model, good readers do not simply guess, and they make less use of context while engaged in fluent reading (Alderson 2000; Grabe & Stoller 2002; Stanovich & Stanovich 1999). Goodman's model also claims that readers do not really read everything but 'sample' the text as they go along. Studies that track eye movements during research repudiate this quite robustly. Skilled reading seems to involve quite a high degree of accuracy and precision (Alderson 2000; Grabe & Stoller 2002). Besides, as Stanovich (1980) explains, the type of hypothesis generation proposed by the proponents of the top-down approach will be even more time consuming than the decoding involved in the bottom-up approach. Although the model has been used to support suggestions for reading instruction (e.g whole word and whole language approaches to reading instruction), these instructions have not been particularly beneficial to students' reading development (Grabe & Stoller 2002:34).

A mainly bottom-up (skills) view of reading does not adequately explain the reading process, nor does it correctly guide reading instruction. Similarly, a solely top-down approach that acknowledges the application of prior knowledge to the exclusion of decoding and automatic processing of words does not give an adequate account of the reading process. In addition, both the bottom-up and top-down reading theories do not distinguish between reading at the beginning stages (learning to read) and reading at a more advanced level (reading to learn). The fact that fluent readers recognize words by sight does not mean that beginning readers should be taught in that way. Such differences between beginning and mature readers need to be accounted for by any theory of reading. Yet the top-down model sometimes fails to distinguish adequately between beginning readers and fluent readers.

2.3.1.3 Interactive approach

The inadequacies of both bottom-up and top-down theories indicate that an appropriate explanation of reading cannot be obtained by any one theory. Instead, an explanation of reading that integrates both approaches seems to be a more plausible approach. Bottom-up processes and top-down processes are both necessary. An interactive approach that

integrates both theories posits that readers process texts from several levels. Van Dijk and Kintsch's (1983) Discourse Comprehension Model, which is usually classified as interactive, posits that reading is a continuous interaction between the visual perception of letters, the understanding of words, the understanding of structure and meaning of a sentence, and the understanding of sentences and text (Brunfaut 2008:12). Stanovich's (1980) Interactive Compensatory Model, which is a classic example of an interactive model, posits that deficiencies at one level can be compensated for by drawing on knowledge at other levels. In other words bottom-up and top-down processes interact to make up for deficiencies at each level. For example, when readers lack the resources at the lower level, higher level processes such as background knowledge take over. Similarly, lower level processes make up for deficiencies at higher levels. Second language readers would frequently apply higher level processing to compensate for lack of linguistic resources at lower levels if faced with difficult texts (Alderson 2000:19; Grabe & Stoller 2002:33-35; Stanovich 1980:35).

The interactive and compensatory activities explained above are absent in the two earlier models. Whereas the bottom-up model assumes that the initiation of higher level processes, such as the use of background knowledge, should await lower level decoding processes, the top-down model, on the other hand, does not take cognisance of lower level processes. The interactive approach acknowledges the essence of both theories and is supported by linguists, in particular Alderson (2000); Grabe and Stoller (2002); Maria (1990); and Stanovich (1980; 1986; 2000 cited in Grabe & Stoller 2002:35). It involves interaction between top-down and bottom-up processes, as well as interaction between the reader and the text (Grabe & Stoller 2002:35). As an example of this model, Stanovich's Interactive Compensatory Model (1980, 1986, 2000) posits that when reading difficulties occur, interaction is increased and compensatory strategies, such as guessing from context, occurs more regularly (Grabe & Stoller 2002:35). According to Nunan (1991:67) poor reading skills at lower levels, for example inadequate vocabulary and non-automatized, low decoding skills, would rely more on other sources of knowledge (e.g. extralinguistic elements and cues).

Given the deficiencies of lower level bottom-up processes of poor readers, there may be a heavy reliance on higher level top-down processes, such as background knowledge application. However, according to Grabe and Stoller (2002) this heavy reliance of poor

readers on background knowledge may lead to inappropriate application of background knowledge leading to erroneous interpretation and unsuccessful comprehension of texts. Aslanian's (1985) study, reported in Nunan (1991:69), shows that schematic knowledge structures can either facilitate or inhibit comprehension depending on whether they are over- or under-utilised. Quoting Aslanian (1985), Nunan (1991:69) states:

If readers rely too heavily on their knowledge and ignore the limitations imposed by the text, or vice versa, then they will not be able to comprehend the intended meaning of the writer.

Rumelhart (1985) has also stated that if our schemata are incomplete and do not provide an understanding of the incoming data from the text, readers will have problems processing and understanding the text. The latter two cognition-based views of reading comprehension, i.e. Top-down and Interactive Theories, apply Constructivist Theory in explaining the comprehension process. The reader actively interacts with the text using background knowledge to construct meaning from text. But the explanation has been considered inadequate in explaining the reading process comprehensively, as it does not give a full account of how and when, exactly, particular interactions take place (Brunfaut 2008:13).

Despite the inadequacies of the top-down and bottom-up theories, they have not lost complete support. Renewed interest in the traditional form of reading comprehension has emerged (Alderson 2000; Urquhart & Weir 1998). Research has shown the importance of decoding skills (accurate and effective decoding) and their contribution to the development of comprehension skills instead of the other way around. However, these research studies cannot be generalised as they involve children and are therefore restricted. Urquhart and Weir (1998) also caution against over emphasis on the slightly modified bottom-up approach, stating that while it may provide an explanation for word recognition, and probably syntactic processing (as this is not exactly clear), it does not explain other aspects of the reading process. In terms of the characterisation of the reading process Alderson (2000:18) states that neither the bottom-up nor the top-down approach is adequate, and that the interactive model is more adequate. He expresses his preference for a construct that entails a complex interaction of bottom-up and top-down information, "in which every component in the reading process can interact with any other component, be it 'higher up' or 'lower down'" (Alderson 2000:18).

2.3.1.4 Comprehensive interactive view of reading

Besides the three metaphorically labelled reading theories discussed above, a more complex interactive view of reading and a more comprehensive theory of the reading process is presented by Grabe and Stoller (2002). Echoing researchers like Alderson (2000:14) and Maria (1990:14), Grabe and Stoller (2002:17) acknowledge that the fluent reading process is rapid, purposeful, motivated and interactive. It is also strategic, evaluating, comprehending and linguistic. Both bottom-up lower-level decoding skills and the top-down higher level comprehension and extralinguistic elements interact to produce successful comprehension of texts. This interaction is extensively described by Grabe and Stoller (2002:18), as illustrated and explained in Table 2.1 below.

Table 2.1: Reading processes that are activated when we read (Grabe & Stoller 2002:18)

Lower level processes	Higher level processes
Lexical access [and word recognition]	Text model of comprehension
Syntactic parsing	Situation model of reader interpretation
Semantic proposition formation	Background knowledge use and inferencing
Working memory activation	Executive control processes

The lower level processes are more automatic and involve linguistic skills, such as vocabulary for lexical access, grammar for syntactic parsing, and the combination of meaning and structural information for semantic proposition formation. In a sense, they require the application of bottom-up processes. These processes are supposed to take place rapidly and automatically in order for the reader to free up working memory time (i.e. the system that holds information and makes it available for further processing) for higher level processes. The most fundamental requirement for fluent reading comprehension involve rapid and automatic word recognition, and lexical access, which are the unconscious recall of the meaning of a word as it is recognised and the way it is accessed (Grabe & Stoller 2002:20). So important is this ability to recognise words in reading that it has been said to be the single most important predictor of reading comprehension (Alderson 2000:35). For good readers word recognition and lexical access are automatic and fast. The importance of this ability, and the difficulties in acquiring it, is explained by Grabe and Stoller (2002:21):

Reading comprehension cannot be carried on for an extended period of time without word recognition skills. However, these skills are difficult to develop without exposure to print (through many hours of reading practice).

The importance of word recognition skills has influenced many reading teachers to lay great emphasis on bottom-up decoding skills. However, as explained earlier, bottom-up decoding skills alone (even though they aid comprehension) do not ensure comprehension at higher levels.

In addition to word recognition skills, the ability to extract grammatical information rapidly is important for comprehension. This ability, referred to as syntactic parsing, enables fluent readers to recognise phrasal groupings, word ordering information, and subordinate and superordinate relations among clauses, in order to clarify how words are supposed to be understood (e.g. *The chair gave no support. Its leg broke,* and, *The chair gave no support. The meeting ended in chaos*). Another process that takes place automatically at the lower level is the process of combining word meanings and structural information into basic clause structure level meaning. Referred to as semantic proposition (Grabe & Stoller 2002:21), this process requires that the recognised words, together with grammatical cues, are integrated in a meaningful way in relation to previous readings. The connection of meaning relations allows the information to be more active in memory and become central ideas if repeated. Semantic propositions formed in this way create a propositional network of text meaning. The three lower level processes (lexical access, syntactic parsing and semantic proposition) occur automatically and are combined rapidly to ensure efficient working memory activation. Poor reading occurs partly due to readers being slowed down as a result of difficulties at word recognition level or partly due to inefficient coordination of processes. The faster the process the more working memory time is freed up for other processes. However, if the processing is slow, the information fades from memory and has to be reactivated making the reading process laborious and painstaking. Grabe and Stoller (2002:25) assert that “the efficient coordination of information from rapid and automatic processes is a necessary component of fluent reading comprehension abilities”. To develop rapid, automatic and efficient coordination of processes, many hours of reading practice and frequent exposure to text is required (Alderson 2000:15; Grabe & Stoller 2002:21).

Higher level processes involve the coordination of ideas from a text to form a meaning representation of the text (i.e. the text model of comprehension), on the one hand. On the other hand, background knowledge, inferencing, reader goals, reader attitudes, reader motivation and strategies for text and task difficulty are used for the interpretation of the text (the situation model of reader interpretation) (Grabe & Stoller 2002).

These higher level processes interact in more complex ways and require higher cognitive abilities. The text model of comprehension is essentially a linguistic one, whereas the situation model involves extralinguistic elements. During the reading process, meaningful linkages to other information are formed and remain in active memory to emerge as main ideas of the text. These main ideas emerge to form an internal summary of the text. Inferencing and background knowledge are required at this level in order to anticipate discourse organisation of text to aid comprehension. Research has shown that successful anticipation of discourse organisation of text improves comprehension and consequently academic reading ability (Alastair 2003; Alderson 2000:35; Anderson 1999:12; Brunfaut 2008; Trabasso & Bouchard 2002).

Whereas the text model reflects the extraction of main ideas for general comprehension, the situation model allows the reader to interpret the text. The situation model shows that the reader makes projections for the reading based on a high degree of background knowledge, inferences, reader goals, reader motivations, task and text level difficulty, and reader attitudes towards text, task, and author (Grabe & Stoller 2002:27). In other words, the reader builds a situation model around the text model by combining other knowledge sources, such as knowledge of the world, knowledge of text structure, affective influences and additional inferences. Thus, whereas the text model is essentially linguistic and requires minimum inferencing, the situation model is derived from various knowledge sources and requires heavy inferencing and a high degree of background knowledge application (Grabe & Stoller 2002: 28; Perfetti, Van Dyke & Hart 2001:133-4). Grabe and Stoller (2002:26, 27) provide the following succinct summary of the two models:

The text model amounts to an internal summary of main ideas [...]
The situation model integrates text information with a well developed network of ideas from the reader's background knowledge, and it interprets new information in the light of reader background, attitudes, motivations, goals and task purposes.

The numerous abilities required, and the high knowledge and affective levels expected for processing texts in this way, require skilful and fluent reading. Fluent readers are able to integrate text and background information appropriately and efficiently in an effortless manner. They are able to both understand the author's ideas (text model) and to interpret the information for their own purposes (situation model). This duality in performance, according to Grabe and Stoller (2002:28), explains how a reader is able to provide a summary of a text (text model) and also offer a critique on the text's position (situation model).

Tertiary level students are expected to integrate and combine aspects of the text model and the situation model when engaging in academic reading. Incorrect or incomplete background knowledge or faulty inferences related to the situation model could affect interpretation of text. At the situation model of reader interpretation low motivation could also lead to shallow processing. It is therefore essential for all the skills and knowledge required for interpretation to be at appropriate levels and to be assembled and coordinated in an appropriate manner. Many researchers (Alderson 2000; Anderson 1999; Grabe & Stoller 2002; Stanovich & Cunningham 1993) identify frequent exposure to texts as the measure that would provide these adequate levels of skills, knowledge and abilities that are required for academic reading.

Besides the linguistic text model, and the extralinguistic situational model at higher level processes, executive control processes (e.g metacognition strategies) are used to oversee or monitor comprehension, use of strategies, reassessment and reestablishment of goals and repair of comprehension problems. In effect, executive control processes represent how we assess our understanding of a text and evaluate our level of comprehension, which is equivalent to metacognition, an important component in (academic) reading that will be discussed later in this section. Alderson (2000:13) elaborates on metacognition in the following way:

Self regulation strategies like planning ahead, testing one's own comprehension, and being aware of and revising the strategies being used are also said to be typical reading strategies of fluent readers.

He concurs with Grabe (1991:382) that metacognitive strategies are used by fluent readers and play a significant role in reading comprehension. Anderson (1999:12) agrees with

McNeil (1987) when he states that whereas efficient readers approach tasks in a more active, strategic, and flexible fashion, poor readers' passivity is reflected in their lack of predicting and monitoring activities. It seems therefore that inability to use metacognition or executive control processes in reading will lead to poor reading comprehension.

Two issues are pertinent. First, that reading comprehension processes occur simultaneously and that some processes (lower level) need to be relatively automatic, for reading processes to work efficiently; second, that fast and efficient processing ensures comprehension of texts. While speed allows more time in working memory to process higher level meaning, automaticity in word recognition enables the reader to identify words rapidly. Unskilled readers are not able to do so due to poor processing at lower level that leaves little or no room for higher level processing. Speed, automaticity and efficiency may not occur effortlessly for these readers when difficult texts are encountered. Students who generally have not had much practice in reading at primary and high school levels will find the automatic processes explained above to be more conscious and effortful. This may be due to inadequate background knowledge, limited linguistic resources (e.g. vocabulary) and low efficiencies, resulting from inadequate exposure to texts. These comprehension difficulties increase if the information encountered is new to the reader (Grabe & Stoller 2002).

A number of students, especially L2 students who encounter these difficulties for various reasons (discussed in Chapter 1), resort to coping strategies that in the long term are ineffective. For instance, some would use a slow, mechanical translation process that often leads to poor operation of working memory efficiencies. Others will force the text to fit certain preconceived notions from past experiences in an effort to form a situation model of comprehension. In this instance, inappropriate background information is activated, leading to poor comprehension (Grabe & Stoller 2002:30). In both cases, Grabe and Stoller point out that successful reading is not likely to occur. In most cases readers will constantly resort to coping strategies, such as translation and guessing, in an attempt to form a coherent account. Such experiences, if repeated continually, will lower motivation in reading. The main solution to the problem, as suggested by researchers in the field, is frequent exposure to texts:

[T]his problem also suggests a likely long-range solution. Students need to engage in reading for many hours at text- and

task-levels appropriate to their abilities. It is only through extended exposure to meaningful print that texts can be processed efficiently and that students will develop as fluent readers (Grabe & Stoller 2002:30).

Such suggested solutions have led many instructors to immerse students in extensive reading. Others have resorted to teaching different aspects of reading in order to achieve quick and fast results. For instance, many instructors have focused on reading strategies, while others have dealt with vocabulary development to promote automaticity in word recognition; or attempted to make students aware of discourse organisation and text structure due to their role in comprehension; or emphasised word recognition, speed and fluency. These solutions, based on the cognitive theories discussed above, are valid, but do not indicate the social nature of reading nor the affective influence on reading, which are crucial issues in reading development.

2.3.2 Social view of reading

The cognitive view of the reading process, as discussed above, is not entirely adequate, as reading is both a cognitive process and a social, affective activity (Alderson 2000:45; Bernhardt 1991a:9; Grabe & Stoller 2002:59; Greaney 1996:5; Guthrie & Wigfield 2000:404; Verhoeven & Snow 2001:2). Reading in the cognitive sense is regarded as a solitary individual activity in which the reader processes and interacts with the text in isolation. However, research has shown that the cognitive processes are greatly influenced by social and affective factors (Alvermann, Phelps & Ridgeway 2007; Elley 1996; Grabe & Stoller 2002; Guthrie & Wigfield 2000; Verhoeven & Snow 2001). For instance, in the comprehensive interactive view of reading, the reader brings his/her social experiences and knowledge of the world in order to construct meaning from text. Schema theory also suggests that reading involves more than utilising linguistic and decoding skills; and that interest, motivation, attitude, context and background knowledge will determine, to an extent, the success that a reader will have with a given text. In sum, reading is a dynamic process in which the text elements interact with other factors outside the text.

The social view of reading is based on social constructivist views of learning, which emphasise the importance of culture and identity as expressed in social norms, rules and understanding. Social constructivists have argued that the social environment greatly influences the cognitive process in learning (Alvermann et al. 2007:26). For example,

Vygotsky (1978) emphasises the critical importance of culture and social context for cognitive development. His concept of Social Cognitive Development states that the child's cognitive development starts within the social environment, before becoming individualised (Vygotsky 1978:57). Vygotsky further argues that cognitive development and cognitive processes are embedded in social interaction. The main ethos of his framework is that social interaction plays a fundamental role in the development of cognition. Whatever the state of the social environment, it influences the cognitive development of the individual. He argues through his concept of ZPD (Zone of Proximal Development) that appropriate cognitive development is attained through engaging in social behaviour. Street (2003), and other socio-cultural reading researchers such as Gee (1991), base their views on Vygotsky's social learning theory and argue that literacy is a social practice. Street (2003:77) argues that his ideological model is based on the premise that "literacy is a social practice, not simply a technical and neutral skill; that it is always embedded in socially constructed epistemological principles". The social view of reading therefore plays a significant role in explaining the reading challenges that students encounter.

With regard to this view, Nunan (1991:72) points out that students are socialized into reading. In other words, the literacy behaviour of people with whom students interact influences the students' literacy practices. Wallace (2003) takes up the social context of the L2 reader and explores the different situations in which such readers acquire and maintain literacy. In her view, for many L2 readers motivation for reading is based on gaining access into a community of readers (Wallace 2003:9).

The influence of outside factors in reading is also shown by Bus's (2001:51) Attachment Theory, which posits that young learners with good and close relationships with their parents develop into better readers than those who do not have this close relationship. This confirms the important role played by significant adults in relation to reading development. In contrast to the cognitive view of reading, which perceives the reading process as an intrapersonal problem-solving task that takes place within the brain's knowledge structures and processes, the social view of the reading process is rooted in the belief that texts are manifestations of structures. These manifestations, Bernhardt (1991:10) explains, imply socially acquired frames of reference, value systems, idiosyncratic knowledges and beliefs. In other words, texts are read within cultural contexts. This stands in contrast to the

cognitive view which perceives that readers take in information in a particular way and process it. That is, depending on the context and the reader, each text is read differently. The reader brings his/her set of values and beliefs into the reading process. Bernhardt (1991) argues that a social view of reading implies that there are no generalised readers or generic reading behaviours. Instead, each reading activity is a unique process depending on the reader's frame of reference – his/her values, beliefs, and so on (Ibid). Secondly, texts are not generic, since each text consists of a number of implied value systems. Each reader approaches a text differently depending upon his/her frame of reference, values and beliefs. Research has shown that “the context or social background from which the learner emerges influences his/her acquisition of literacy skills” (Bernhardt 1991:11). The learner's social background could conflict with the school culture, causing difficulties for the learner. Bernhardt (1991:12), citing Wells' study, states that:

[W]hen a learner's home environment does not mesh with the school environment [...] the learner's attainment of literacy skills from the majority culture's point of view is retarded. The critical point here is that this retardation is not the result of a cognitive deficit, but rather the result of the conflict between home and school cultures; in other words, the result of a social mismatch.

This mismatch between home and school cultures is projected by Niven (2005) in her study of students' and lecturers' frames. The students in her study, who are deemed among the best of their peers by their admission into university, struggle with their reading and writing due to the mismatch between their frames and those of their lecturers. Clearly, reading is not entirely cognitive, but also highly social. The social issues in turn manifest in the cognitive abilities of the students, leading to poor literacy levels. In addition to the influence of the social environment or background of the reader, the interpretation of the text itself also suggests a social perspective to the reading process, in that the interpretive process ensues from different perspectives depending on the reader's social view. In other words, a reader interprets a text based on his/her social and historical point of view.

The social constructivist view of reading, posits that cognitive processes of reading are influenced and propelled by the reader's social behaviour. Alexander and Fox (2008:20) state that “social and contextual forces matter greatly in reading and reading instruction”. Readers may encounter problems at a social level, which may influence their cognitive processing. For example, learners from print poor homes and environments may experience difficulties in reading due to their low encounter with texts.

In addition, the social environment may influence the reader's motivation to read. Wallace (2003:9), in discussing the social context of the L2 reader, argues that learners are socialised into reading and that they read not only for enjoyment and information, but to gain access into a 'community' of readers. In other words, if reading is an accepted behaviour of those with whom learners come into contact, then they are much more likely to want to read. Wallace's (2003:9) discussion indicates that reading performs a socialising function and the reader's ability to read is usually linked to his social group. She states that "readers [...] enact their roles as members of communities". It is therefore essential that in developing students' reading ability their socialisation into reading should be investigated. Also, as (academic) texts are to be read from the perspectives of the values of the (academic) community (Bernhardt 1991:14), it is important to have knowledge of the perspectives from which students approach academic reading. As discussed earlier, a number of students have difficulty in operating from the perspective of the academic community. These students struggle with interpretation of texts, and therefore seek comprehension solely from linguistic elements or from their background knowledge, which usually lead to wrong interpretations and faulty inferencing (Alexander & Fox 2008:18).

The proponents of the social view of reading argue that in order for the reader, especially in L2 contexts, to overcome this difficulty they have to "gain access to implicit information possessed by members of the social group for which the text is intended" (Bernhardt 1991:14). Bernhardt (1991:16) argues that understanding of the linguistic elements of a text is cognitively oriented, whereas the interpretative aspects are very socially and culturally dependent, and a reader needs to perceive both in order to interpret a text successfully. The difficulty experienced by readers at interpretation and inference level could be attributed to social background differences as well as L1 and L2 reading differences (August 2006:258; Bernhardt 1991:15; Niven 2005:785). The argument is that L2 readers and the texts they read usually represent separate and distinct social entities. Whereas L2 readers approach the text with an L1 framework of the language, the text may call for a different framework from which the intended audience will interpret it. Bernhardt (1991:16) puts it succinctly thus:

Hence before second language readers even reach a text, an inherent conflict exists. This conflict exists from micro level features of text (e.g. orthography) through grammatical structures [...] to the social nature of access to literacy.

The argument according to a number of reading researchers (Alderson 2000:25; Bernhardt 1991:16; Grabe & Stoller 2002:68; Verhoeven & Snow 2001:2) is that literacy is both social and cognitive in nature, therefore models that represent literacy, specifically L2 literacy, should be both social and cognitive in nature.

2.3.3 Affective/ response theories

In addition to the social and cognitive theories of literacy, as expounded above, researchers have also advocated affective theories of literacy. Response theories explain how readers' affect (i.e. goals, interests, attitudes, motivations and involvement in the learning experience) influence and control their reading abilities. The Reader Response Theory, as advocated by Rosenblatt (1978), describes reading as a complex transaction between reader and text and explains that the way a reader responds to a text and the meaning a reader constructs from a text are influenced by the stance or purpose that the reader chooses. Although she proposes both ³efferent and aesthetic purposes she puts greater emphasis on the aesthetic.

Alvermann et al. (2007:369) advocates that feelings, attitudes, motivations, interests, and other affective responses of the reader are used in interacting with the text. These affective responses are crucial for reading development, as together with other factors they determine the amount of reading a reader does. For instance, readers' affect influences their willingness to read and their ability to use appropriate strategies for comprehension. Alvermann et al. (2007:29) cite Wigfield et al.'s (1996) study to show that motivational dimensions of enjoyment, curiosity and self-efficacy were the best predictors of the frequency with which students' read. Using the Motivations for Reading questionnaire on 600 middle grade students from various backgrounds, Wigfield et al. (1996) found that enjoyment, curiosity and self-efficacy best predicted students' reading frequency.

Fluent reading involves the use of well orchestrated strategies, and for a reader to be strategic he/she has to be motivated. In other words the reader has to have a positive attitude, high interest and the willingness to read, which will result in the application of strategies and the enhancement of comprehension abilities. When students are motivated

³ “The predominantly efferent reader focuses attention on public meaning, abstracting what is to be retained after reading – to be recalled, paraphrased, acted on, analyzed. In aesthetic reading, the reader's selective attention is focused primarily on what is being personally lived through, cognitively and affectively, during the reading event (Rosenblatt 1985:101-102).

“they view themselves as competent readers who are in control of their comprehension processes; they are said to be strategic in their approach to reading” (Alvermann et al. 2007:29), and consequently, successful readers. Various means of motivating students have been advocated, with learner autonomy and student choices being the most significant. The Humanistic approach (an approach that focuses on the needs of the individual) calls for instructors to create an appropriate environment where motivation can be enhanced in order for learners to take responsibility for their own learning.

In line with humanistic theories (Cook 2001; Brown 2000), and the emphasis on lowering of anxiety and inhibitions to promote learning, reading research has put the reader’s affect at the centre stage of reading development. Krashen’s Monitor Model for learning advocates for a lowering of the affective filter in order to promote learning (Brown 2000:279). The reader’s affect needs to be at positive levels to attain a high reading frequency that would yield reading proficiency equivalent to academic reading levels. Providing a positive teaching and learning environment, for example an unrestrictive environment that promotes participation and increases motivation, is therefore an important issue in reading classrooms.

Researchers such as Anderson (1999), Grabe and Stoller (2002), and Guthrie and Wigfield (2000) have pointed out that readers’ affect is important in raising reading levels. In particular, Guthrie and Wigfield found that 13-year-old students who were involved in reading had higher achievement than 17-year-old students who were less involved in reading. They concluded that students’ involvement in reading provide them with self-generated opportunities that are equivalent to several years of education (Guthrie & Wigfield 2000:404). Grabe and Stoller (2002:56) argue that students’ affect influence their willingness to engage in reading tasks. However, very few researchers have systematically pursued the issue of affect in reading.

2.3.4 Current directions in reading development

Besides the three dimensions of reading theories – cognitive, social and affective – that have been discussed in relation to reading development (cf. § 2.2.3), recent directions in reading development have been towards metacognition, New Literacies and engaged reading. Metacognition involves the monitoring strategies that readers employ in comprehension. The New Literacies refers to multiliteracies and is rooted in Social

Constructivism, while engaged reading emphasises the reader's affect in reading. Engaged reading and affective factors are discussed in Chapter 3. This section discusses metacognition and New Literacies.

2.3.4.1 Metacognition

Metacognition refers to the reader's ability to plan, self-monitor and self-evaluate comprehension during reading (Alderson 2000:13; Grabe & Stoller 2002:28; Takallou 2010:273). The metacognitive view explains reading in terms of the strategies that readers use to monitor comprehension. Sets of flexible and adaptable strategies are used to make sense of a text and to monitor ongoing understanding. These control strategies that readers execute in their effort to understand a text is what has been referred to as metacognition (Dole, Duffy, Roehler & Pearson 1991). The application of metacognitive strategies is thought to be fairly conscious and the assumption is that they can be explicitly taught. So important is Metacognitive Theory that many reading teachers focus on explicitly teaching students reading strategies to promote successful reading, especially in academic contexts, where such strategies are vital for comprehension.

The metacognitive view of reading adds a monitoring dimension to the reading process. According to this view the reader becomes aware of his/her own mental processes. This advanced technique in reading involves a great deal of independent learning. Metacognition relates to cognitive strategies that focus on the reader's ability to classify, sequence, establish whole-part relationships, compare and contrast, determine cause-effect, summarise, hypothesise and predict, select and extract relevant points from texts, infer, and conclude (Fontanini 2004; Urquhart & Weir 1998). These abilities are required in academic reading, and comprehension involves the ability of the reader to monitor these processes, hence the importance of metacognition in academic reading. Fontanini (2004:179) claims that for demanding texts, readers have to be highly skilful and strategic if they want to read effectively.

Current researchers (e.g. Alderson 2000; Alvermann et al. 2007; Grabe & Stoller 2002) who have attempted to explain the reading process have all acknowledged the importance of metacognition. Esperet (in Fontanini 2004:175) explains that the three aspects to take into consideration in reading are: the organisation of lower level language units, storage of information in working memory, and the way the reader controls the process of accessing a

piece of information. This resonates with Grabe and Stoller's (2002:20) comprehensive framework of the reading process, which includes an executive monitor – a kind of metacognition that oversees the appropriate coordination of these processes. Gernsbacher (1990), in attempting to describe how cognitive processes (specifically the application of background knowledge) work in the construction of comprehension, developed the Structure Building Framework. The framework posits that for comprehension to take place, readers need to apply strategies to restart the reading process if the incoming input does not fit or cohere with any stored structure. His explanation relates to metacognition, as it refers to the monitoring of input. Instruction has focussed on teaching strategies that students can apply to gain comprehension, as well as drawing their attention to the monitoring strategies that enhance comprehension. Besides the knowledge gained in this type of instruction, the students also become more confident when given explicit instruction, which may lead to increased self-efficacy – an affective factor that corresponds to reading achievement.

2.3.4.2 New Literacy Studies

Another recent direction of reading that is embedded in Social Constructivism, but with a critical and political postmodernist edge, is the New Literacy Studies (NLS). NLS is based on Street's (1995; 2003) and Gee's (1991; 2000) views on socio-cultural literacy emanating from Vygotsky's social constructivism (cf. §2.2.2). The NLS has viewed reading practices as multidimensional. Reading is no longer perceived as a psychological phenomenon in which individuals, who can decode and have the requisite background knowledge of drawing inferences, are able to arrive at the 'right' interpretation of a text. Instead, the NLS focuses on "what literacy events and practices mean to users in different cultural and social contexts" (Street 2003:10). Proponents of this approach believe that "reading and writing are shaped by (and in turn, help to shape) multiple socio-cultural practices associated with becoming literate" (Alvermann et al. 2007:15). In other words, reading and writing are influenced by the different social environments and cultural practices that relate to students' reading behaviour. The NLS, therefore, involves "ways of behaving, knowing, thinking and valuing" (Ibid) in relation to reading, and hence comprehension extends beyond the printed words. This socio-cultural view of reading has begun to influence reading instruction. It proposes that instruction should be geared

towards students' reflexive and expressive views. Although this view relates to the current multicultural and diverse social groups of students, and as Alvermann et al. (2007:16) point out, has much to be admired in its natural approach to literacy instruction, its application in classrooms has come under criticism lately. One of the criticisms is that instructors who teach in accordance with the NLS, and from a reader response perspective, put too much emphasis on personal experience and individual interpretation at the expense of critiquing texts.

However, as some researchers (Lewis 2000; Moje, Willes & Fassio 2001) argue, these shortcomings can be corrected and worked around "to enable the important gains realised through student centred instruction to move forward" (Alvermann 2007:16). The view is that the NLS and reader response approaches are useful in acknowledging student voices, providing student choices, and promoting motivation. Consequently, such approaches should not be discarded, but should be applied in a manner that minimises the limitations.

In relation to the NLS, which projects the social view of language learning and teaching (cf. § 2.2.2) further by arguing for identification and expression of students in relation to their diverse social and cultural backgrounds, August (2006) advances an English Second Language Readers (ESLR) theory. Based on the socio-cultural view, August (2006) argues for a theory that differentiates adult English Second Language Readers from children and first language readers. August argues that adult ESL students come to ESLR with diverse educational backgrounds, and consequently a descriptive model needs to build in variability to account for a wide range of L1 literacy skills that traditional and non-traditional adult ESLR readers bring to the educational process. She presents a model of L2 adult reading, arguing that due to a number of factors models that describe adult ESLR would differ from those created to cater for L1 reading or even child ESLR. These factors, include the possible transfer of a wide range of L1 reading skills; the various kinds of L1 and L2 educational experiences; and adult cognitive abilities. Her model therefore accounts for an additional component (level 3) of adult learners' academic reading, such as academic vocabulary, complex linguistic structures, various writing genres, and relevant background and cultural information. Level 1 represents child ESLR and level 2, traditional adult ESLR with strong L1 literacy skills. An illustration of her model is given in Figure 2.1 below.

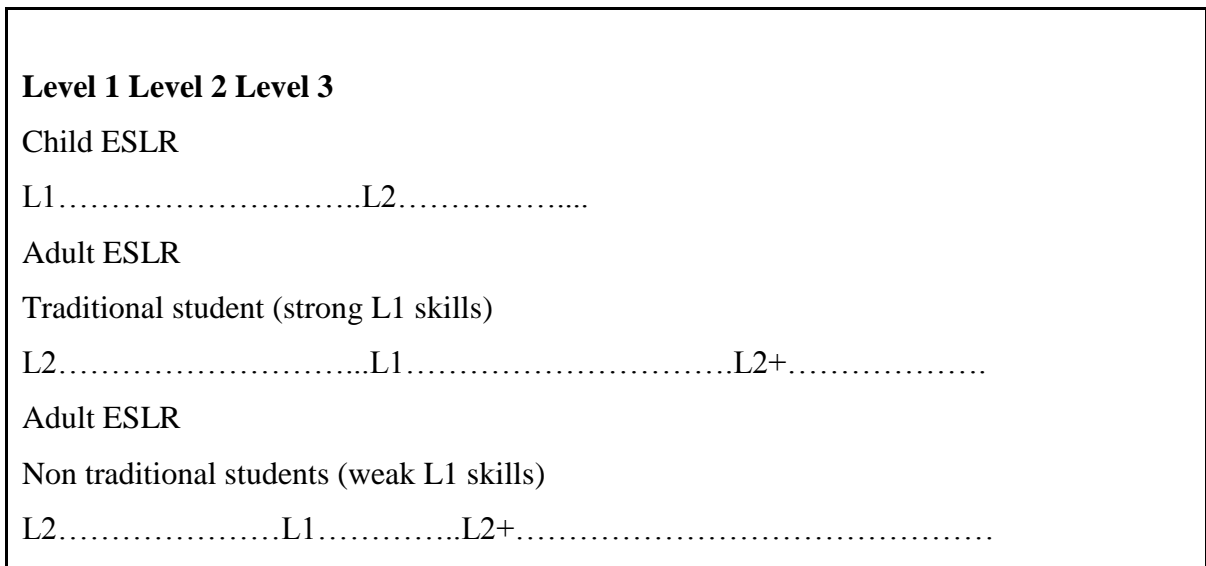


Fig 2.1: Three levels of ESLR (August 2006)

According to the model, child ESLR is less complex than adult ESLR. A child will transfer basic decoding skills from the L1 to L2 reading given the language threshold. A child does not need the academic reading skills of level 3. However, with the adult ESLR, where additional comprehension and academic reading skills are required, the situation is more complex. Those with strong L1 skills will transfer the skills and will therefore need less instruction in L2 academic reading skills required at level 3. Non-traditional students who have weak L1 reading skills will have very little skills to transfer and will therefore need more instruction in L2 reading to make up for lack of L1 cognitive reading skills. Students with weak L1 reading skills, unlike the traditional students, need more time to gain more exposure to the L2 in order to acquire academic reading skills of L2. These students, short-changed by many of the factors mentioned in Chapter 1, are weak in the cognitive aspect of L2 and also weak in L1 reading skills. The solution, according to August (2006:259), is to improve L2 language and reading skills. She explains that

[t]raditional ESLR readers can build reading proficiency by using previously developed L1 reading knowledge to support the newly developing L2 language skills, and so need a smaller component of advanced academic skills (level 3). The non-traditional ESLR readers have less sophisticated L1 reading knowledge and require a model that will account for the development of advanced skills in the L2 (level 3). In other words, the non-traditional ESLR would need to acquire the most academic skills not from transfer but from L2 instruction.

Pretorius's (2007) study relates to this situation, as she found Grade 7 students to perform better in L2 reading skills than in L1 reading skills. Another basis for providing L2 reading instruction is that adult learners, specifically tertiary level students, do not have the time to acquire L1 literacy skills before transferring them onto the L2. The ideal would be to acquire L1 literacy skills in childhood, transfer the skills onto the L2 and enhance them with more exposure to the L2. This, unfortunately, is not the case with non-traditional students who lack L1 literacy skills, and have poor L2 reading skills. August (2006:260) advocates for a curriculum that considers these ESLR factors for such students. She states:

Although transfer occurs for all ESLR readers, the academic goals of an individual with a weak L1 background are more dependent upon the newly acquired L2 skills and require a curriculum which provides a highly intensive focus on L2 language, grammar, and reading skills.

August's model, though a good explanation of ESLR, emphasises cognitive development to make up for reading deficiencies. She admits that ESLR needs more than transfer to achieve academic goals, and specifies grammar instruction and teaching of reading skills in addition. While her model is a logical representation of ESLR reading, and her solution a justified one, instructions need to be supported with a willingness to learn and the motivation to do so.

From her explanation, August assumes that all ESLR students have had some reading experience in the L1. However, this is not always the case. In a number of South African tertiary institutions, as in the UP context, many mother-tongue speakers of indigenous African languages have not read literary texts or expositions in their L1. A reading model in the South African context would have to cater for these ESLR students who fall into two categories, that is those with strong L2 skills and those with weak L2 skills. Though both groups have virtually had no reading in the L1 (probably due to a number of factors, including lack of expository books in the African languages, etc; (cf. § 1.1.2.1), one group can be termed traditional as they have had extended exposure to the L2 as a result of higher SES and print rich home and school environments. For this group of students, although they have poor or no L1 literacy skills to transfer, the prolonged exposure to L2 through instruction and pleasure reading has been adequate to develop efficiencies in reading. They will therefore need a shorter time to develop advanced academic reading skills, and may operate at the same level as those traditional students who have strong L1 reading skills. The second group (non-traditional students), though similar to the first

group (i.e. weak L1 literacy skills), differs in the sense that they do not have adequate L2 reading skills. This disadvantage may be attributed to low SES, a poor reading culture at home, inappropriate instruction and poor resources common in poor rural and urban schools (Pretorius 2007; Pretorius & Mampuru 2002; Scheepers 2008), as discussed in Chapter 1. With these disadvantages the students are highly at risk of failure, given the advanced academic reading skills expected of them at tertiary level. Students in this second group, like August's group of non-traditional students with weak L1, need more time to develop comprehension skills and the complex academic reading skills required at tertiary level.

August's model is significant in distinguishing the different types of ESLR readers. Although she cites the need for a model to distinguish the different groups due to variability in educational backgrounds, her focus is solely on cognitive development. The cognitive approach assumes that the affective is already in place or is insignificant, but students from disadvantaged reading backgrounds with poor reading habits – weak L1 and/or poor L2 literacy skills – usually have low reading motivation and show a lack of interest in reading (Boakye 2007). A model of cognitive intervention should include the development of the affect, which would form the basis for cognitive development to be achieved (Bus 2001; Guthrie & Wigfield 2000; Verhoeven & Snow 2001).

The following issues need to be considered in developing the reading skills of this group of non-traditional students (those with weak L1 literacy or virtually no L1 literacy and poor L2 reading skills).

- **Exposure to L2 through reading.** Increased reading and exposure to texts is advantageous for vocabulary development. If students read often, they become familiar with a number of academic words. Vocabulary acquisition is gained more extensively through exposure (pleasure reading) than it is gained through instruction (Anderson 1996). In addition, through frequent reading, more complex syntactic constructions (e.g. passives, nominalisation, subordination, etc.) become easier to understand; genre conventions, structure and discourse patterns, become more familiar and reading fluency and speed are increased.

- **Instruction to complement the process of reading development.** As students at tertiary level do not have time to allow reading ability/proficiency to develop naturally, instruction should therefore accompany the reading of texts. Reading strategies should be taught to students to develop the use of cognitive strategies and to increase awareness (metacognition). Fluent and skilled readers are known to use appropriate, well-orchestrated strategies (Anderson 1991; Anderson 1999; Barnett 1988:150; Nunan 1991:77), and explicit vocabulary instruction has been found to be beneficial for poor readers (Scheepers 2008).
- **Engaging in many hours of reading to develop efficiencies, speed and appropriate use of strategies.** The more students read, the better they become at reading. However, texts used to improve reading should adhere to Krashen's principle of Comprehensible Input (Brown 2000; Cook 2001; Nunan 1991). In other words, texts should neither be too difficult nor too easy for students. Texts should be at a level slightly above students' level of comprehension. Students' reading rate and their knowledge of high frequency words (up to the 3,000 word level) and academic words in English would give an indication of whether or not they read Grade 12 texts at frustration level. Texts can then be scaffolded or gradually increased in level of difficulty until the required academic reading level expected of tertiary students is reached or attained. The gradual increase in text difficulty will help improve students' motivation as well as self-efficacy. Grabe and Stoller (2002:30) caution against the reading of difficult texts by students with low reading proficiency. Pretorius (2007) refers to it as reading at frustration levels. Frustration level reading leads to a sense of inadequacy, boredom, low motivation and lack of interest (Grabe & Stoller 2002:30).
- **Development of the affect to evoke interest, motivation and love for reading.** The issue of affect is central to all aspects of reading. The three principles stated above should be pursued in a manner that enhances student motivation and interest. This will provide students with the necessary will and desire to read and will mitigate any apathetic feelings and negative attitudes that they may have developed towards reading as a result of difficulties experienced in reading. Whereas some students may have developed reading efficiencies either through L1 reading that transfers to L2 reading, or through long exposure to L2 reading, and could therefore be given reading instruction through cognitive approaches, others need

more than just a cognitive approach. Non-traditional students who are weak in L1 and/or L2 reading, and who consequently have low motivation to read do not only need intensive development of reading skills but an affective approach to boost motivation, change negative attitudes and allow the cognitive development to successfully occur.

- **Creation of an environment in which students have choices and autonomy, and perceive that their voices are acknowledged.** According to the Reader-Response Theory and the New Literacy Studies, literacy is shaped by the multiple socio-cultural practices that students engage in. In promoting reading proficiency at academic level, students should be given choices in tasks and texts; autonomy and freedom in learning; and be allowed to express their voices in various ways, while at the same time developing academic literacy competence that conforms to academic conventions.

While this section has discussed cognitive and social theories of reading, and briefly mentioned the influence of affect in reading, the following section briefly explains some social and psychological theories/views of learning, which further strengthen the need for a social and affective perspective to (academic) reading development.

2.4 Social and psychological theories that relate to learning

As explained in Chapter 1 and in the previous section of this chapter, the difficulties that students face in academic reading can be attributed, inter alia, to the influence of social and affective factors. Hence, if an effective solution focussing on socio-affective factors is to be found in the tertiary teaching-learning context, as this study seeks to do, it is necessary to discuss social and psychological models that account for human behaviour in general, and human learning behaviour in particular.

According to social theorists certain factors are salient in influencing human behaviour and shaping lives, and these need to be examined closely. A systems model of human behaviour presented by the psychologist Huitt (2003) illustrates the components of the individual and posits that the individual's cognition, affect and volition culminate in overt behaviour. This behaviour and other aspects of the individual develop as a result of cognitive transactions, which are influenced by biological maturation and the environment.

Huitt's model is discussed in conjunction with the views of the social psychologist Bandura (1986; 2001). First, a brief account of salient theories of human behaviour and of learning is given.

Human behaviour has been explained in various ways in terms of psychological models. The behaviourists' theories of the 1950s emphasised observable processes and explained human behaviour in terms of environmental stimuli and behavioural responses. They believed that if and when provided with a stimulus an individual would behave accordingly. These theories on human behaviour and of learning have greatly influenced teaching methodology. Rote learning and memorisation were predominant, and reading pedagogy was conducted through drills of isolated skills, such as phonics-based instruction (Alexander & Fox 2008:14). A decade later (1960s to early 1980s) cognitive explanations of human behaviour, posited by cognitive psychologists, refuted the behaviourist emphasis on observable processes triggered by the environment, to focus on mental processes such as memory and problem solving. Cognitive theory was used to explain reading as a cognitive process in which the reader engages in a problem solving activity. Reading instruction was mainly on appropriate use of strategies and prior knowledge, as the readers prior or background knowledge "was shown to affect the comprehension, interpretation and recall of written text" during reading (Alexander & Fox 2008:15, 16).

Later, humanistic theories were advanced by Rogers (1983) as explained in Brown (2000:89, 90). He emphasised subjectivity of meaning and a concern for positive growth. The theory rejects Determinism (the theory that all events including human decisions are predetermined by previous events), and posits that given the right environment the individual has the ability for growth and development. Humanistic theories relate to social psychologists and sociologists' view that the individual is shaped by the society within which he/she interacts. Bandura's (1986; 2001) Social Cognitive Theory provides a framework for understanding, predicting and changing human behaviour. The theory describes human behaviour as interactions occurring between personal factors, behaviour and the environment. Bandura (1986; 2001) explains that the interaction between a person and his/her behaviour involves influences by a person's thought and actions. Secondly, the interactions between the person and his/her environment involve the person's beliefs and cognitive competences, which are developed and modified by social influences and structures within the environment. The third interaction is between the environment and

behaviour. In this interaction, a person's behaviour determines aspects of his/her environment, and this behaviour is in turn modified by that environment. Figure 2.4 below illustrates the three interactions involved in human behaviour as described by Bandura (2001).

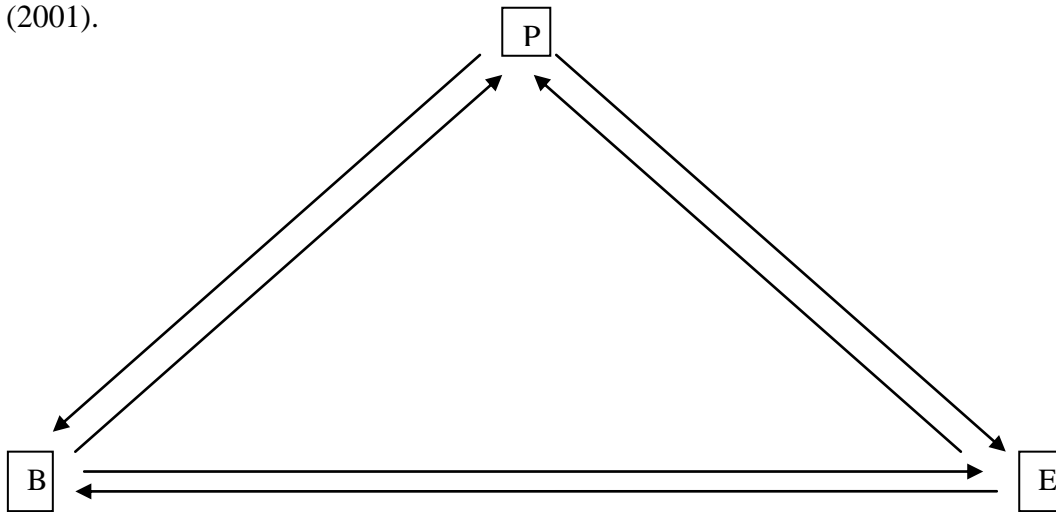


Fig 2.2: Social cognitive theory: B represents behaviour, E represents the external environment, and P represents personal factors in the form of cognitive, affective, and biological events

Bandura's description of the second (i.e. interactions between a person and his/her environment) and third (i.e. interactions between the environment and behaviour) interactions is shared by many social psychologists and sociologists. The view, as shared by social theorists, is that the environment influences the individual, and the individual in turn has an effect on the environment. Bandura's model opposes the cognitive view that learning and also reading can be analysed mainly from a cognitive perspective. It illustrates how various factors – cognitive, social, affective – influence human behaviour, including learning. He posits that the environment or context plays a dual role as it influences the individual and also responds to the individual's output and overt behaviour. Another aspect of his model posits that the environment which surrounds the individual, and with which he/she is in constant interaction, plays a major role in his/her development. This context, he argues, needs to be examined in the pursuit of changing people's behaviour. In support of Bandura's model, Huitt (2003) identifies the family and the community (i.e. schools, religious institutions, peer groups, and the culture with which the family identifies) as the most immediate and earliest influences on the individual. In addition to the influence of these micro systems, he states that influences from society,

such as societal and global changes in the economy, can filter down and influence an individual's behaviour.

Huitt (2003) argues that to fully understand human behaviour, we should not only examine it from a cognitive perspective but also take other sources into account, for example the environment (i.e. social and cultural contexts). He argues that external environmental factors play a significant role in human behaviour, and cognitive issues, which are internal, are informed by external environmental factors. Hence an integration of all factors (i.e. cognitive, social, affective, etc.) is necessary in devising a solution to cognitive and behavioural problems.

However, these external factors, as argued by several scholars, are not deterministic. For instance, Giddens (2001:668) believes that ways of acting, thinking or feeling “might constrain what we do, [but] they do not determine what we do”. Human behaviour in the form of students' reading behaviour and resultant cognitive difficulties could have been influenced by negative social factors, but these influences are neither final nor deterministic. Individuals, if influenced positively by social factors (e.g. school environment, appropriate instruction, home environment, etc.) will be able to change their behaviour in a positive direction. In other words, if a student's social, educational and cultural background has deprived him/her of reading frequently and gaining exposure to texts, a positive environment if created, even at tertiary level, could influence the student to read more. Guthrie and Wigfield (2000: 404) argue that students who are poor readers due to their low SES background could become proficient readers given the right environment and appropriate instruction. The intervention designed as part of the present study therefore attempted to create an appropriate environment to influence students' reading behaviour and academic reading ability.

Most current social theorists who propose that external environmental factors which influence human behaviour should be identified and examined in order to institute change, also argue that the influence of social factors is bidirectional and that the object of influence could, in turn, influence the external factors. Applied to reading, the external environmental factors of family and community (e.g. schools) could influence the students in their reading behaviours – positively or negatively – resulting in corresponding academic performance. This will in turn influence the family and community in either a

negative or positive way. Whereas it is difficult, or almost impossible, for tertiary institutions to directly change the external factors that influence students' reading behaviour, change could be brought about in students in a manner that will counteract negative external influences of the immediate family and community. The educational environment, using appropriate methods of instruction and creating an appropriate teaching environment and ethos, could inculcate positive reading behaviour in students. Such an approach, as adopted by the current study, focussed on students' affect in order to bring about the desired change. The assumption was that the change in students' reading behaviours would enable them to become successful readers and consequently achieve academic success. The manner in which students' affect in reading can be influenced by the educational environment, as well as the social and affective factors (e.g. motivation, self-efficacy, attitude and interest), which are targeted in changing students' reading behaviour, are discussed in Chapter 3.

The next section provides a synopsis and justification for the consideration of social and affective issues in reading development.

2.5 A synopsis and justification for social and affective issues in reading development

Earlier models of reading were linguistically or cognitively oriented and focussed on the linguistic and cognitive aspects of reading. Solutions to reading difficulty, that were and are still based on these theories, adopt mainly a cognitive approach. Current theories have recognised and been orientated towards social and affective influences. In an attempt to provide a comprehensive account of reading, Grabe and Stoller (2002) distinguish L1 reading from L2 reading and identify social, cultural and affective factors as important in L2 reading development. This is an important departure from the strictly cognitive explanation of earlier models. However, exposure to texts, which Grabe and Stoller (2002) perceive as a solution to addressing students' reading difficulties, is not adequate for the South African context. It is indeed correct, as research has shown that exposure to texts improves reading comprehension and other cognitive abilities related to reading. However, to benefit from text exposure, or rather for exposure to be worth while, other factors also need to be considered. This is especially important for non-traditional students who, due to social, educational and cultural factors have had limited exposure to print, are poor

readers, may have different attitudes to books and reading and have low affective levels. Also, due to their SES and/or cultural background they may approach reading with frames vastly different from that expected by their lecturers (Niven 2005). For such students, exposure to print should be underpinned by raising their affective levels. In other words, not only should students be exposed to texts, but their motivation and interest should be raised, and their attitudes (social and cultural) should be encouraged to undergo positive change to derive expected levels of academic reading. Explicit reading instruction should also be undertaken simultaneously, as exposure alone does not provide significant improvement due to time constraints. Scheepers (2008:38) argues from her findings that “for poor readers, exposure to reading alone is not enough, and there must be explicit focus on [...] teaching”. Also, instruction will enhance the use of executive processes, increase metacognition and consequently self-efficacy, which have been shown to improve academic reading comprehension (Barnett 1988; Ghonsooly & Elahi 2010).

Besides instruction, there is a need to address reading difficulties from social and affective perspectives. Grabe and Stoller (2002:37) conclude a chapter on reading processes as follows:

This emphasis on individual processes is not intended to deny the relevance of social factors on reading development (e.g. family literacy experiences, primary schooling, peer and sibling interaction around literacy events, etc.) or the relevance of social contexts on purpose and processes themselves [...]

Although August’s (2006:259) descriptive model distinguishes different types of ESL readers as a result of their different educational backgrounds (which is an important distinction), it provides mainly cognitive redress. Like the earlier models it focuses on a cognitive approach to reading development. Niven (2005) however, in providing a socio-cultural explanation to students’ reading problems and difficulties, recommends “that a more ‘socio-cultural’ understanding of literacy should be considered”. She contends that this would facilitate a rapprochement of frames between lecturers and students. In relation to socio-cultural theory, Niven (2005) explores attitudes and assumptions that students bring from their homes and schools to the tertiary learning context. She found that students’ reading frames were primarily cognitive, focussing on skills, as a result of their socio-cultural and educational backgrounds, whereas lecturers’ expected expressive frames for reading that focussed on meaning – what is behind rather than before the eyes. In an

attempt to operate in the expected expressive frame of their lecturers, students applied inappropriate background knowledge and engaged “with ideas that were related to reading but not as often, in a disciplined and systematic way with the text itself” (Niven 2005:785).

She further comments on the dilemma of the students:

The students’ lack of experience of a range of different kinds of reading conflicted with expectations that they would be able to recognise and process the wide variety of textual genres. Their lack of experience of general reading meant that they were often unable to use appropriate extratextual or intertextual frames to make inferences about textual meanings.

Niven (Ibid) argues that without adopting a socio-cultural framework to first understand socio-cultural factors contributing to students’ underpreparedness for academic reading tasks and then devising appropriate means to address the problem, the conflict of frames will continue to exist and successful teaching and learning will not occur. She asserts that it is dangerous and alienating to assume that ‘osmosis pedagogy’ would work equally well with all the diverse socio-cultural groups that typify the South African academic environment (Niven 2005:786). It is clear that a socio-cultural stance is needed to understand students’ reading problems and to help devise an appropriate instructional framework.

2.6. Conclusion

Different theories of reading, including bottom-up, top-down, and Interactive, as well as Grabe and Stoller’s (2002) comprehensive lower- and higher-level processes, have been discussed to give insight into the reading process and to highlight areas of difficulty for tertiary students regarding academic reading abilities. For instance, some students lack automaticity and have limited academic vocabulary for lower-level processes to occur effortlessly. Others apply coping strategies and provide incorrect interpretation at the situation level of text interpretation, due to a lack of background knowledge and a milieu of affective factors. In addition, social and affective theories of reading, as well as recent directions in reading, such as metacognition and NLS, were discussed to show recent emphases in reading development. In relation to the fact that reading processes take place within the individual as well as in interaction with external factors, and in light of the focus on students’ reading behaviour and reading ability in the present study, social and psychological theories that influence human behaviour have been briefly discussed. The

next chapter discusses in greater depth the social and affective factors that influence reading ability.