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## **Aliteracy : causes and solutions**

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# Chapter *1*

**General Introduction**

Successful people often describe themselves as avid readers thereby suggesting that reading strongly attributes to their successes. The writer Maarten 't Hart, for instance, enjoyed recreational reading from first grade on. He finished all books he brought home from his weekly visit to the local library in just a few days ('t Hart, 2015). Stephen King wrote in his book 'On Writing: A Memoir of the Craft': "If you don't have time to read, you don't have the time (or the tools) to write. Simple as that." (2000, p. 147). Former US president John F. Kennedy was a speed reader who could read about 2,500 words per minute (10 times the average reading speed) and not only read six newspapers from cover to cover during breakfast, but enjoyed reading biographies and James Bond novels as well (Meagher & Gragg, 2011).

A wonderful example of the benefit of recreational reading is the distribution of the Armed Services Editions (ASEs), 123 million pocket-sized paperbacks, among American soldiers during World War II. In a fascinating account of this project, Manning (2014) described the impact this program had on young American soldiers sent to war more than 70 years ago. The books, started as an initiative by librarians and later taken over by the US Council on Books in Wartime, were extremely popular among soldiers and had a great impact on them both during and after the war. During the war, the books helped soldiers to abide waiting periods at the front and to distract wounded soldiers from their injuries. Shortly before D-day, a million books were spread among the American soldiers to keep morale high while awaiting the invasion. In other words, the books provided an occasional 'escape from hell'. Besides the impact of the ASEs during the war, many soldiers maintained the reading habits they developed in wartime after their return. The GI Bill of Rights - a law that provided a range of benefits for returning World War II veterans - provided former soldiers with cash payments of tuition and living expenses to attend university, high school or vocational education. This policy was criticized because educators feared that the former soldiers would not be able to meet educational standards. The opposite was true: the soldiers had developed reading habits and were well informed on many topics by reading the ASEs during the war. Students at the University of California referred to the former soldiers as DARs: 'Damned Average Raisers' because they had excellent study skills and outperformed most of their fellow students.

### **Reading for pleasure makes a difference**

Apart from anecdotal support for the importance of recreational reading, there are studies revealing evidence for effects of recreational reading on academic and professional success. In a study including approximately 3,500 Dutch adults, the

Dutch sociologist Notten (2011) analyzed retrospective reports of parental practices for children between 5 and 15 years. It turned out that higher educational attainments were related to more parental reading guidance, including book recommendations from parents, parent-student discussions about books, and parental interest in what their son or daughter is reading. Longitudinal research that assessed the reading activities and skills of the same participants at various points in time to produce more convincing evidence for causal relations also supports Notten's model. For instance, a study by Gottfried, Schlackman, Gottfried, and Boutin-Martinez (2015) showed that reading in preschool age is predictive for reading motivation in adolescence while reading motivation in adolescence predicts higher educational attainment at age 29. Another longitudinal study also supports the hypothesis that reading for pleasure is vital for later professional success. Taylor (2013), a sociologist from the UK, analyzed 17,200 questionnaires completed by people born in 1970. He assessed recreational activities at the age of 16 and their professional status at the age of 33. After controlling for educational attainment, recreational reading appeared to be the only out-of-school activity of 16-year-olds that links to better career perspectives. Individuals who reported reading books at least once a month at age 16 were more likely to have managerial or professional jobs at age 33 as compared to those who did not read books. No other out-of-school activities, including playing an instrument, theatre attendance or sports, made a difference for career prospects.

The EU High Level Group of Experts on Literacy (2012) argued that in the near future literacy skills will become increasingly important for professional success. As about 30% of semi- and unskilled jobs will disappear between 2010 and 2020, low literacy may not only be problematic for the individual's academic and professional success, but also for prosperity and wellbeing in society at large. The Dutch opinion maker H. J. A. Hofland argued that a new functional illiterate underclass (individuals whose reading skills are insufficient to fully participate in present day society) might enlarge the risk of political instability of society due to insufficiently informed citizens and over-simplified opinions (Hofland, June 3, 2015). In their final report the EU High Level Group of Experts on Literacy (2012) concluded that currently about 20% of adult Europeans miss the literacy skills to find a job, adequately support their children's literacy, manage their own health, and take advantage of digital development.

### **Reading: a boost for academic as well as social skills**

"With less print exposure, low ability readers are unlikely to improve their reading and spelling skills to the same extent as their peers who do choose to read" (Mol & Bus,

2011, p. 289). Moreover, a low level of reading proficiency has serious consequences for individual students' other academic skills and opportunities to expand those. Reading is not only an important academic skill in itself, but reading is an important tool for learning other academic skills (reading-to-learn). Even learning mathematics is strongly related to reading skills (e.g., Jordan, 2007).

Reading is also important for the development of social skills that are indispensable for professional success. The Dutch writer Philip Huff suggested in *De Correspondent* (July 13, 2015) that recreational reading also contributes to understanding life events. Readers are more successful in social situations including collegial contacts and job interviews. Reading allows them to be better able to see the world from other peoples' point of view. Preschoolers, for instance, score higher on social abilities as assessed by a Theory of Mind (ToM) test when their parents read more fictional narratives from storybooks to them (Mar, Tackett, & Moore, 2010). That is, they are better able to take another person's perspective and respond in an empathic way to other people. Likewise, in a series of experiments focusing on adults, Kidd and Castano (2013) found that reading literary fiction temporarily enhances the complex social skill of "mind-reading" to understand others' mental states. The study shows that it is not just any fiction that is effective in fostering ToM, but rather that the literary quality of the fiction is the determining factor. Literary fiction (Anton Chekhov or Alice Munro) is preferable to popular fiction (Dan Brown or Ian Fleming).

### Main issues in the current thesis

Although recreational reading seems vital for reading skill development, a substantial portion of students stop reading recreationally early in their development as a reader (Mol & Bus, 2011). It is a striking finding that many Dutch adolescents do not spend any time on recreational reading. Almost half of the Dutch adolescents (49%) report that they never or almost never read for pleasure in their leisure time. Compared to other countries, this percentage is rather high in the Netherlands. Only 2 out of 65 countries participating in the PISA study have a higher percentage of students reporting that they do not read (OECD, 2010a). Probably as a result of this, rankings of Dutch students in international studies are decreasing (Kordes, Bolsinova, Limpens, & Stolwijk, 2013; Meelissen et al., 2012). In the PIRLS study, for instance, the Netherlands ranked 2<sup>nd</sup> in 2001, 9<sup>th</sup> in 2006, and 13<sup>th</sup> in 2011. In other words, Dutch students are slowly falling behind probably as a result of declining interest in recreational reading and, hence, lack of reading practice already in primary school.

Many students thus face 'aliteracy' (Boorstin, 1984), that is, they have the ability to read but do not practice reading and, due to lack of practice, their reading skills remain underdeveloped. In 2007, the Dutch Inspectorate of Education reported that 25% of students were at least two years behind in reading skill when they leave primary school. Lack of practice may also explain why the number of adolescents and adults facing serious delays in reading skill is much larger than the 4% diagnosed as dyslexic (Blomert, 2006). A substantial minority (14.4%) of Dutch adolescents scored below level 2 in the most recent PISA study, which indicates that they are functionally illiterate (OECD, 2010b). In all, there are about 1,3 million people in the Netherlands over the age of 16 years who experience problems with reading and writing (Buisman, Allen, Fouarge, Houtkoop, & van der Velden, 2013).

This thesis focuses on two main issues related to aliteracy:

1. Why so many students have already stopped reading in the latter years of primary school, and
2. how students can be supported to be more motivated to read, to read recreationally in their leisure time and to become more proficient readers.

### Overview of the dissertation

**Chapter 2** includes results of a large-scale longitudinal study focusing on the development of reading motivation in primary school. Changes in reading motivation in two phases, from grade 3 to grade 4 and from grade 5 to grade 6, are described in relation to reading proficiency, gender, appreciation of the school library, and parental support of book reading at home.

**Chapter 3** examines whether, due to negative reading experiences, students develop negative emotions about reading and perceive reading as a source of threat. That is, students build up negative connotations with reading that may become a reason to avoid reading, just as individuals with some anxiety disorder avoid the source of threat (e.g., Beidel & Alfana, 2011; Kase & Ledley, 2007; Kerig & Wenar, 2006). Perceiving reading as threatening may strengthen a causal spiral of disinterest and decreasing time spent reading. Neurobiological studies show, for instance, that anxious people have difficulty with the use of attentional control mechanisms during tasks that are related to their anxiety (Bishop, 2009; Eysenck & Derakshan, 2011; Frewen, Dozois, Joannis, & Neufeld, 2008).

The EU High Level Group of Experts on Literacy (2012) recommended, amongst other things, the creation of a literate environment with a large selection of reading materials. Thus **Chapter 4** investigates whether an enriched school library including a

large and modern book collection can improve interest in reading and literacy skills.

**Chapter 5** describes an experiment that addresses the potential of digital reading including a Pedagogical Agent. Even though most schools do schedule time to read self-selected hardcopy print books, this is usually limited to one or two hours a week and there is no guidance when students read for pleasure. After the heavy investment in early reading instruction, literacy development is neglected in late primary school (Snow & Moje, 2010). The need to develop a reading routine and make reading miles is left to a student's own responsibility as soon as they are able to read independently. Prolonged guidance of reading may be vital to make students continue reading practice. The impact of digital support in the form of a pedagogical agent (PA) providing guidance during reading is explored in line with Kirschner, Sweller and Clark's (2006) argument for the use of guided instruction instead of unguided or minimally guided instruction.

Finally, **Chapter 6** reviews the conclusions of the studies presented in this thesis, implications for future research and recommendations to help students become, or remain, enthusiastic readers.

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