

Reading: Assessment and Research

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In the early phases of reading development, children must establish a system of mappings between letters and sounds that allows them to translate print into sound. However, to be a skilled reader, they must also develop the skills that allow them to extract meaning from connected text. The Simple View of Reading is a useful theoretical framework for considering the processes involved in reading. It proposes that skilled reading (reading for meaning) is the product of two sets of skills: word recognition and language comprehension. Both components are necessary and neither is sufficient on its own. For example, a child who has insufficient word recognition skills will not be able to access texts. Equally though, a child with word recognition skills and yet poor language comprehension will not be able to fully understand the messages conveyed by texts. The Simple View is depicted in the figure below. This view is now widely used in research and has been adopted in two recent policy documents (see further reading below for more details).

Figure 1. The Simple View of Reading

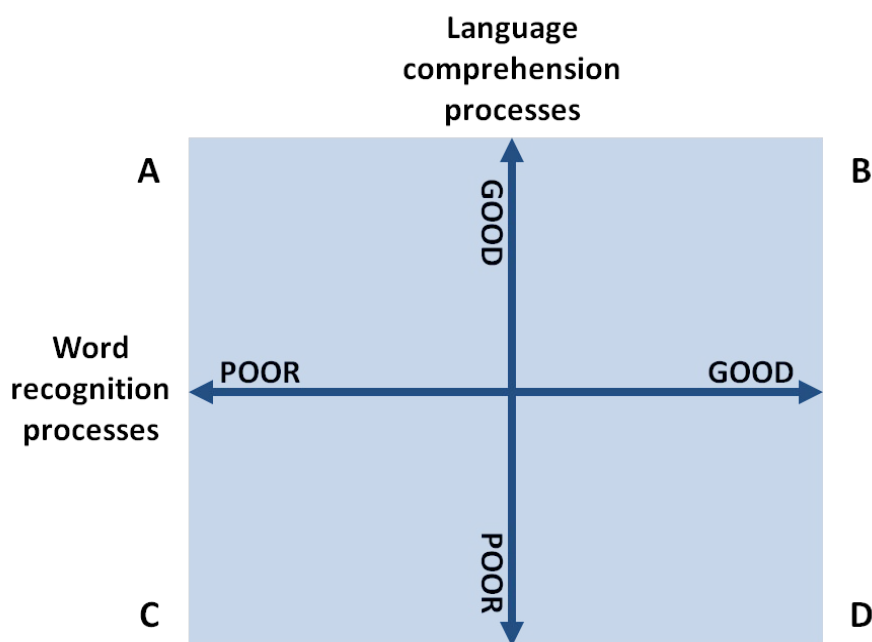


Figure 1 shows word recognition skills ranging from poor to good on the horizontal axis and language comprehension skills ranging from poor to good on the vertical axis. Importantly, the figure illustrates how reading ability can vary continuously across two dimensions: word recognition and language comprehension. Children in the top right quadrant (B) are unimpaired readers, with good word recognition and language comprehension skills whereas children in the bottom left quadrant (C) have difficulty with both word recognition and language comprehension. For these children, word recognition and language

comprehension skills develop roughly in parallel. However, these dimensions can dissociate in development resulting in children who show an uneven reading profile. Dyslexia (quadrant A) is characterised by poor word recognition skills alongside unimpaired language comprehension. Less well known are a group of children referred to as poor comprehenders. These children make up approximately 10% of primary school children and show comprehension deficits despite age-appropriate word recognition skills. In summary, strengths in both word recognition and comprehension are necessary for skilled reading and there are three reasons why a child might be a poor reader; poor word recognition, poor comprehension, or both.

An important implication of the Simple View of Reading is that a thorough assessment of reading ability should include tasks that measure both word recognition and comprehension. A wide range of word reading tasks are used in reading research. Assessing word-level reading is relatively simple and standardised tests generally follow the same format, with children reading a list of words of increasing difficulty. In contrast, assessing reading comprehension presents many challenges. One reason for this is that constructing meaning from text involves a number of cognitive processes such as accessing the meanings of individual words, activating background knowledge and generating inferences. Tests of reading comprehension vary enormously in terms of the nature of text that the child reads, and the response format via which comprehension is inferred. The Neale Analysis of Reading Ability II (NARA-II) has frequently been used as a test of reading comprehension in UK research. In this test a child reads a series of narrative texts aloud and any reading errors are corrected by the assessor so that comprehension can be maintained. Following reading, the child answers four or eight open-ended questions tapping both literal understanding and inference. This test yields measures of text reading accuracy, text reading rate and reading comprehension and includes normative data collected in 1996. Importantly, because children read passages aloud with correction, the measures of reading accuracy and comprehension are relatively independent.

The York Assessment of Reading for Comprehension (YARC) Passage Reading Test follows essentially the same structure as the NARA-II: children read passages and answer eight questions. However, it provides more recent normative data (from 2008) and includes some important developments. First, the YARC assesses the ability to read a range of materials by including non-fiction as well as fiction texts. Second, as it includes a beginner passage that is a shared reading task, the YARC can be used to measure comprehension in the very first stages of reading. Third, the passages that children read are determined by their word reading accuracy (performance on the Single Word Reading Test 6-16) rather than their chronological age. This ensures that passages are at an appropriate level of difficulty and therefore, the examiner can avoid administering a large number of passages to provide a sensitive measure. These improvements mean that the YARC provides a useful new tool for assessment and the test is being adopted for current research. For example, last year we

used the test to measure reading skills in a large group of children aged five to eleven years. The main aim of this project was to explore how oral vocabulary knowledge relates to reading across a wide age range and the full spectrum of reading abilities depicted in the Figure 1 above. Currently, we are using the YARC to investigate reading accuracy, comprehension and rate in children that have oral language impairments and autism spectrum disorders. The results of these research projects will be disseminated to academics, teachers, parents and policy makers in the near future.

Literacy is a key indicator of educational attainment and early identification of children with reading difficulties and appropriate intervention are clearly important goals. Appropriate assessment allows us to identify children with reading difficulties, specify the nature of a child's reading impairment and put in place appropriately targeted interventions. Since the YARC Passage Reading Test takes only ten minutes to carry out, it is an efficient starting point for establishing whether a child has difficulty with reading in terms of accuracy, fluency and/or comprehension. It can also be used to monitor reading progress in children with and without reading difficulties. Reading is a complex activity that is underpinned by oral language and other skills. Once the nature of a child's reading difficulty has been ascertained, further assessment of reading-related skills can inform intervention.

Further reading

Cain, K., and Oakhill, J. (2007). *Children's comprehension problems in oral and written language: A cognitive perspective*. New York: Guildford Press.

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