

Summary for Thomas Atkins

Number of scores at --- 5
Number of scores at -- 3
Number of scores at - 0

At Risk Quotient = 1.7

Diagnosis is 'strongly at risk'

Test	Score	At risk	Decile
Rapid Naming	30	o	6
Bead Threading	8	+	7
One Minute Reading	12	---	1
Postural Stability	19	---	1
Segmentation	5	---	1
Spoonerisms	8	--	1
Two Minute Spelling	6	---	1
Backwards Span	3	--	2
Nonsense Passage	24	---	1
One Minute Writing	11	--	1
Verbal Fluency	11	o	3
Semantic Fluency	13	o	4
Non-Verbal Reasoning	8	+	9

DST-S results for Thomas Atkins

Thomas Atkins of Dotheboys Secondary School was tested on 15/12/2002 by Angela Fawcett. At the time of the test, he was 11:11 years old, and so the norms for 11:6 to 12:5 years were used.

The DST is a 30 minute, nationally-normed screening test designed by Dr. Angela Fawcett and Prof. Rod Nicolson of the University of Sheffield, and was first published in 1996 by The Psychological Corporation, 32 Jamestown Road, London NW1 7BY. The DST-S is the second edition (2004) and is designed for testing in secondary school age (11:6 to 16:5 year old) children. It is intended for use by education professionals, and provides an overall 'at risk' index for likely literacy difficulties, together with a 'profile' of scores on a range of skills that provide a basis for identifying appropriate support strategies or for referral for further testing by an appropriately qualified psychologist.

It should be stressed that the score here is a 'snapshot' of the performance at a particular time on a particular day. Performance can vary as a function of time of day, illness, confidence and other factors. There are also systematic variations in all performance indicators in terms of the child's and the school's general background and resources. In general one might expect the average performance of children from a disadvantaged background to be slightly below the norms here. Of course the key point is that performance should improve following appropriate support, and this screening test is intended to provide useful information on how this can best be done. Additional suggestions are given in the DST-S manual.

At Risk Quotient

The overall 'At risk Quotient' was 1.7

This is in the lowest 4 percent for children of this age and is considered a 'Strongly at risk' score.

Profile

The profile of skills is Very Spiky, with overall performance noticeably below average.

There are relative weaknesses in Literacy, Balance, Phonological, Memory.
There are relative strengths in Speed, Fluid, Dexterity.

Outline Diagnosis

Because there is a risk of reading failure, it is appropriate to consider the likely significance of the profile of scores in indicating whether dyslexia may be an underlying problem, or whether it is more likely to be caused by generally low literacy.

We must emphasise that the DST-S is a screening test not a formal diagnosis. Hence these notes are only indications that may help subsequent diagnosis. Neither the authors nor Harcourt Assessment take any responsibility for the outline suggestions given here.

There are seven signs of dyslexia, namely:

- At Risk Quotient (ARQ) is 1.7 - Strongly at risk;
- Very Spiky skills profile;
- Weak literacy (mean 1 - in the lowest 5 percent).
- Discrepancy of 4.83 points between fluid IQ and phonological skills
- Weak phonological skill (mean 1.67 - very significantly below average).
- Good fluid intelligence (mean 6.5 - noticeably above average).
- Poor balance (mean 1 - in the lowest 5 percent).

Percentile Ranges

The Band column shows how performance compares with other children in the same age band. There are 10 bands, with band 1 corresponding to the lowest 10%; band 5 corresponding to percentile 41-50 etc. In summary, the percentiles show:

- lowest 20%: One Minute Reading, Postural Stability, Segmentation, Spoonerisms, Two Minute Spelling, Backwards Span, Nonsense Passage, One Minute Writing
- below average: Verbal Fluency, Semantic Fluency
- average: Rapid Naming
- above average: Bead Threading
- top 20%: Non-Verbal Reasoning

Implications of DST-S scores

Rapid Naming: Good performance normally indicates a well-organised verbal system, and is normally associated with good reading subsequently.

Bead Threading: Good performance normally indicates a well-organised eye-hand system, and may or may not be associated with good reading subsequently.

One Minute Reading: Weak performance normally reflects either low literacy knowledge or general lack of fluency in reading.

Postural Stability: Weak performance is normally associated with slight problems in the vestibular system, or possibly low muscle tone.

Phonemic Segmentation: Phonological skill is a critical component of learning to read and spell, helping the child to perceive regularities and patterns in word sounds. Weak performance indicates likely problems in learning to read fluently.

Spoonerisms: Weak performance may reflect a difficulty in verbal working memory and in articulatory fluency.

Two Minute Spelling: Weak performance normally reflects either low literacy knowledge or general lack of fluency in spelling.

Backwards Span: Weak performance normally reflects a lack of efficiency in the working memory system, but this can arise from a number of causes (including attentional deficit, lack of familiarity with the digits, or even hearing problems).

Nonsense Passage: Weaknesses in Nonsense Passage Reading indicate an over-reliance on rote word learning, and a lack of understanding of the regularities of the writing system. They are symptomatic of early stages in learning to read.

One Minute Writing: Slow speed of writing normally indicates a lack of writing fluency. This may arise from a general slight motor problem or from poorly learned writing skills.

Verbal Fluency: Good performance on verbal fluency indicates both good fluid intelligence and good memory organisation on alphabetic lines.

Semantic Fluency: Good performance on Semantic Fluency indicates both good fluid intelligence and good memory organisation on semantic lines.

Non-Verbal Reasoning: Good performance indicates good problem solving and good levels of attention. It is usually associated with good achievement.

Implications for dyslexia

One Minute Reading: Children with dyslexia or general literacy difficulties may perform poorly on this test.

Postural Stability: Many children with dyslexia show balance problems, whereas children with generalised poor literacy usually show good balance.

Phonemic Segmentation: Most children with dyslexia or with generalised poor literacy usually show phonological difficulties, often into adulthood.

Spoonerisms: Most children with dyslexia or general literacy difficulties may perform poorly on this test.

Two Minute Spelling: Children with dyslexia or general literacy difficulties will normally perform poorly on this test.

Backwards Span: Many children with dyslexia, general poor literacy or attentional problems will perform poorly on this test.

Nonsense Passage: Most children with dyslexia or with general poor literacy will perform poorly on this test.

One Minute Writing: Many children with dyslexia or with general poor literacy will perform poorly on this test.

Implications for support

One Minute Reading: Difficulties with One Minute Reading indicate that further reading support is needed, and that a more in-depth analysis of reading speed, accuracy and comprehension might be undertaken.

Postural Stability: There are several exercises designed to help with balance, but there is debate over whether such exercises help with reading. Nonetheless, there is considerable evidence that balance board and catching exercises can significantly improve a child's confidence and general performance. Postural Stability is best seen as an index of the efficiency of the child's vestibular / muscular system rather than as a pointer to literacy support.

Phonemic Segmentation: The phonics component of the UK Literacy Strategy is designed to improve phonological skills. It may also be valuable to check such issues as whether the child can break a word down into syllables, and a syllable down into phonemes. See the DST-S manual for further references.

Spoonerisms: The phonics component of the UK Literacy Strategy is designed to improve phonological skills. Games such as 'Pig Latin' are also good methods of building skill and fluency.

Two Minute Spelling: Difficulties with Two Minute Spelling indicate that further spelling support is needed. Specific suggestions for spelling support are given in the DST-S manual.

Backwards Span: Weakness on Backwards Span is an important diagnostic indicator, in that it suggests that the child may have difficulty remembering more than one thing at a time - a serious difficulty in many classrooms. There are no specific exercises for helping with working memory, though attempts to get the child to concentrate on the task, and to monitor his/her performance can be valuable.

Nonsense Passage: Weakness on Nonsense Passage Reading is an important diagnostic indicator, in that it suggests that the child is not fully aware of the regularities in written language. There is some evidence that practice with

nonsense words has a beneficial effect, but the more traditional approach is to use 'word families' to indicate each of the many regularities to be learned. Children with dyslexia find this skill one of the most intractable.

One Minute Writing: Weakness on One Minute Writing is not an important diagnostic indicator as such, in that difficulties can arise from various sources. However, given the importance of sheer writing speed in examination performance, if there are other indicators of literacy difficulties, weakness in writing may provide a basis for a request for extra examination time.