

Writing Readiness Inventory Tool In Context (WRITIC) - normative data in regular education and initial evaluation in special education





Handwriting is important





- connection between doing and thinking (James & Engelhart, 2012)
- 12-33% handwriting difficulties (Overvelde et al., 2010)
- prevention is important
- better prepared for grade 1 (Hoy et al, 2011)



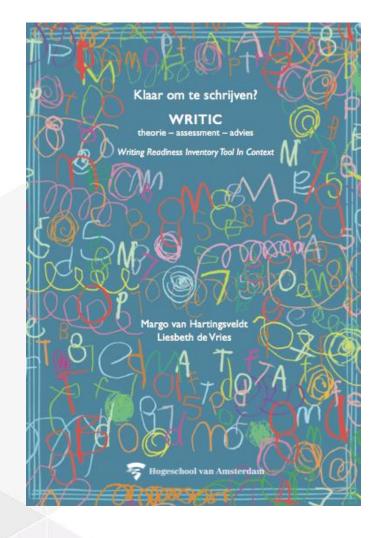
WRITIC

Purpose

- evaluating writing readiness
- Intended population
- kindergarten children
- typically developing
- 5 6 years old

In the context

administered in the classroom







3 domains

Person

- interest paper- and pencil tasks
- sustained attention

Environment

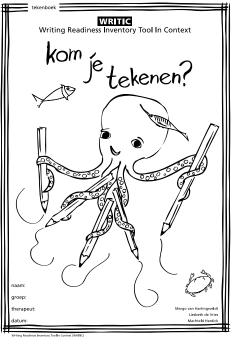
- physical desk & chair
- social class climate

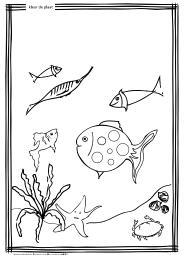
Paper-and-pencil tasks

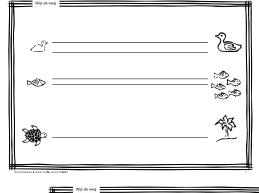
- task performance (WRITIC-TP)
- intensity of performance

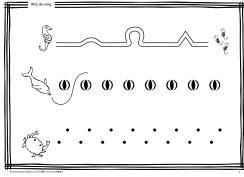


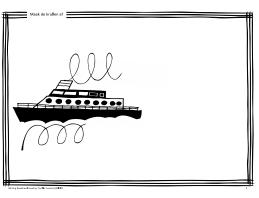
Drawing book

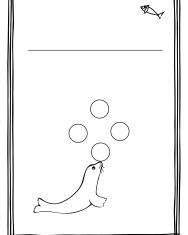


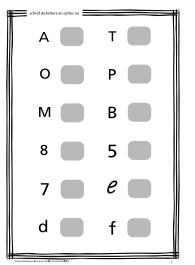














Scoring of the WRITIC





Psychometric research

N=251 classical test theory

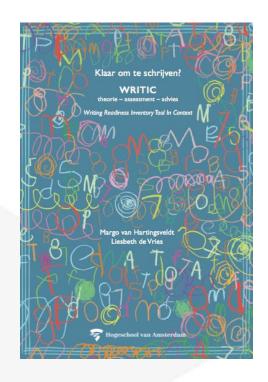
Norm-referenced WRITIC-TP

- validity
 content validity discriminative validity
 convergent validity with 9-HPT and Beery VMI
- reliability

 internal consistency test-retest reliability interrater reliability
- predictive validity

Criterion-referenced domains

• 'child' and 'environment' important for advice and intervention





Normative data WRITIC-TP

Total children	n = 374
boys	190 (51%)
girls	184 (49%)
no migration background	316 (84%)
migration background	58 (16%)
right-handed	327 (87%)
left-handed	44 (13%)

- children from 5 to 6,5 year (M = 67 months)
- significant difference between boys and girls



Research Special Education (SE)

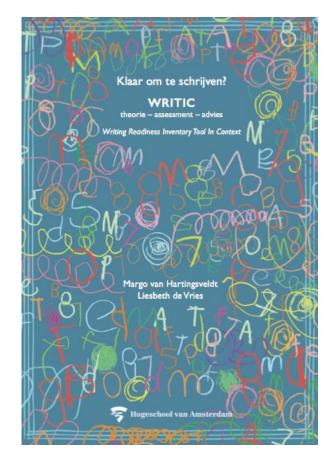
- N = 63 (5-7 year)
- 81 % of the children was not ready for handwriting based on the norms of WRITIC
- good feasibility in SE

	N	Minimum	Maximum	Mean	Std Dev
WRITIC-TU SE (raw score)	63	8	46	31,6	7,9
WRITIC-TU RE (raw score)	374	23	46	41,3	4,4



Manual

- Dutch 2016
- English 2018



- van Hartingsveldt, M.J., P. B.M. Aarts, I. J.M. de Groot, and M. W.G. Nijhuis-Van Der Sanden. 2011. "Standardized tests of handwriting readiness: a systematic review of the literature." *Developmental Medicine and Child Neurology* 53 (6):506-15. doi: 10.1111/j.1469-8749.2010.03895.x.
- van Hartingsveldt, M.J., E.H.C. Cup, I.J.M. de Groot, and M.W.G. Nijhuis-van der Sanden. 2014. "Writing Readiness Inventory Tool in Context (WRITIC): Reliability and convergent validity." *Australian occupational therapy journal* 61 (2):102-109.
- van Hartingsveldt, M.J., E.H.C. Cup, J.C.M. Hendriks, L. de Vries, I.J.M. de Groot, and M.W.G. Nijhuis-van der Sanden. 2015. "Predictive validity of kindergarten assessments on handwriting readiness." Research in developmental disabilities 36:114-124.
- van Hartingsveldt, M.J., L. de Vries, E.H.C. Cup, I.J.M. de Groot, and M.W.G. Nijhuis-van der Sanden. 2014. "Development of the Writing Readiness Inventory Tool in Context (WRITIC)." Physical & occupational therapy in pediatrics 34 (4):443-456.