Here's How I Write: A Child's Self-Assessment of Handwriting and Goal Setting Tool

Julie Bissell, OTD, OTR/L, ATP and Sharon Cermak, EdD, OTR/L, FAOTA

Here’s How I Write

A CHILD’S SELF-ASSESSMENT AND GOAL SETTING TOOL: Improving Handwriting Abilities in School-Aged Children

Therapro, Inc. www.therapro.com
225 Arlington Street
Framingham, MA 01702-8723

Tel: (508) 872-9494 • (800) 257-5376
Fax: (508) 875-2062 • (800) 268-6624

Email: info@therapro.com
*Here’s How I Write* is a criterion referenced handwriting self-assessment tool to engage children in the handwriting evaluation and intervention process. Originally developed in Israel as a Hebrew language assessment tool by Sarina Goldstand, MSc, OTR and Debbie Gevir, MSc, OTR, the newest version was adapted from the original by Sharon Cermak, EdD, OTR/L, FAOTA and Julie Bissell, OTD, OTR/L, ATP.

**PURPOSE**
To assess a child’s self-perception of handwriting and to actively engage the child in identifying goals to improve handwriting.

**AGES**
7-12 years, Grades 2-5

**ADMINISTRATION TIME**
15 – 20 minutes to administer

**BENEFITS**
The HHIW assessment and goal setting process develops a child’s self-awareness, self-evaluation, and self-determination to become active learners.

**HIGHLIGHTS**
- Presented in a card game, a fun and engaging child-centered format.
- Improves a child self-direction and a teacher’s and therapist’s understanding of the child’s handwriting needs, an important factor in the Response to Intervention literacy and learning process.
- An ecologically valid, occupation-based handwriting assessment useful as an important addition to fine motor, visual motor and traditional handwriting performance assessments.
- Uses the child’s work samples in the context of typical classroom assignments to form a baseline and monitor progress.
- Children take an active role in assessment and participate in writing measurable handwriting goals and monitoring progress.
- HHIW process helps a child improve the automaticity and legibility of their own handwriting which supports the development of literacy – early phoneme recognition, visual memory, decoding, reading and writing fluency.
This study examines the validity of a new handwriting evaluation, *Here’s How I Write: A Child’s Self-Assessment of Handwriting and Goal Setting Tool* (HHIW) designed to help teachers and children identify handwriting problems and work together in finding solutions.

The purpose of the study is to determine whether children can accurately self-assess their handwriting such that the test discriminates between children with good and poor handwriting.

### STUDY HYPOTHESES

1. There will be a difference on the *Here’s How I Write: A Child’s Self-Assessment of Handwriting and Goal Setting Tool* between children with good and poor handwriting, children with poor handwriting rating themselves significantly lower.

2. There will be a moderate correlation between teacher and child ratings of handwriting.

### BACKGROUND

Competence in the ability to read and write (literacy) is the ultimate goal and desired outcome of education, as there is a high correlation between literacy, post-secondary education, future earning, and ultimately quality of life.¹

Learning to write is an essential component of literacy and an important foundation needed to support a child’s academic success. Children in elementary school spend 31% to 60% of each academic day occupied with fine motor tasks, with the majority of that time involving handwriting ². Between 10 to 30 percent of elementary school children struggle with handwriting. This may lead to difficulty participating in a very important daily occupation for children.³

When a child is able to exercise control over his work and set his/her own goals he/she is likely to develop self-determination and become internally motivated to achieve.⁴ As such, a recent trend involves children in the process of self-assessment and collaboration in setting educationally relevant occupational therapy goals.⁵ HHIW is a tool designed to involve children in the assessment and goal setting process to improve handwriting.
Participants
• 40 children in second through fifth grade identified by their teachers as having good handwriting (n=20) or difficulty with handwriting (n=20)
• Race/ethnicity of participants: Hispanic (60%), White / Non Hispanic (28%), Asian (5%) and Other (7%).
• All students in the good handwriting group were in general education. Of poor handwriting group, 35% were in general education only, 50% were in general education with support services, and 15% were in a special day class setting.

Instrument
*Here’s How I Write* (HHIW) is a self assessment of handwriting that consists of a set of 25 cards (a sample and 24 test items). Two items assess affective aspects of writing (e.g. I feel that I write well; I like to write.), three items measure physical factors (e.g. I sit up straight in my chair), and the remaining 19 items assess performance components (e.g. I stay on the line when I write).

Procedures
Children were assessed one-on-one in their classrooms. Each child was shown two cards and was asked which is more like him (I feel that I write well; I feel that I don’t write well), and then asked whether his choice is a little or a lot like him. Children responded to each of the 24 pairs of cards, while the therapist recorded their responses on a Child Form. The teacher rated the same characteristics of the child's writing.

ACKNOWLEDGEMENTS
Appreciation is extended to the students, teachers and administrators of the Anaheim City School District for their participation in the research.
RESULTS

- Poor writers rated their handwriting significantly lower than good writers.
- Teachers of children with poor handwriting rated them lower than teachers of children with good handwriting; ratings were comparable for good writers.
- Correlation coefficient of all children compared to their teachers was .62.

Table 1. Comparison of Mean Total Scores for Good and Poor Handwriting Groups

<table>
<thead>
<tr>
<th>Handwriting Groups</th>
<th>Good</th>
<th>Poor</th>
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<tbody>
<tr>
<td>Child Mean</td>
<td>86.00</td>
<td>72.85</td>
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<tr>
<td>SD</td>
<td>7.25</td>
<td>11.32</td>
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<tr>
<td>Teacher Mean</td>
<td>81.65</td>
<td>49.85</td>
</tr>
<tr>
<td>SD</td>
<td>13.10</td>
<td>8.55</td>
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Table 2. Comparison of the Mean Total Scores in Affect, Performance and Physical Factors for Good and Poor Handwriting Groups

<table>
<thead>
<tr>
<th>Component</th>
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<tr>
<td>Affect Items 1-2</td>
<td>Child Mean</td>
<td>SD</td>
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<tr>
<td></td>
<td>6.65</td>
<td>1.27</td>
</tr>
<tr>
<td></td>
<td>5.80</td>
<td>1.64</td>
</tr>
<tr>
<td>Teacher Mean</td>
<td>6.70</td>
<td>1.22</td>
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<td>3.40</td>
<td>1.05</td>
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<table>
<thead>
<tr>
<th>Performance Items 3-21</th>
<th>Child Mean</th>
<th>SD</th>
<th>t (df)</th>
<th>p</th>
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<tr>
<td></td>
<td>68.65</td>
<td>5.94</td>
<td>11.93</td>
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<tr>
<td></td>
<td>57.70</td>
<td>9.57</td>
<td>10.92</td>
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<td>Teacher Mean</td>
<td>64.85</td>
<td>10.26</td>
<td>6.66</td>
<td>&lt;.0001</td>
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<tr>
<td></td>
<td>39.30</td>
<td>7.66</td>
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<td>&lt;.0001</td>
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<table>
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<th>t (df)</th>
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<td></td>
<td>10.30</td>
<td>1.34</td>
<td>7.98</td>
<td>&lt;.0001</td>
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<td></td>
<td>9.20</td>
<td>1.70</td>
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<td>5.12</td>
<td>&lt;.0001</td>
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<td>6.95</td>
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<td>&lt;.0001</td>
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DISCUSSION / CONCLUSION

Children with poor handwriting rated their handwriting significantly lower than children with good handwriting. These findings indicate that children with poor handwriting are aware of their deficits as they rated themselves lower than children with good handwriting. However, although they scored themselves significantly lower than the children with good handwriting, they rated their handwriting higher than did their teachers. This study provides support for the validity of HHIW as a self-assessment of handwriting. Children reported enjoying the test and its card game format.

REFERENCES