Criterion Validity of the Spelling Performance Evaluation for Language and Literacy (SPELL)

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No Child Left Behind

- According to the No Child Left Behind Act (NCLB), schools need to be more accountable for the academic success of students.
- Four priorities of NCLB: accountability, using scientific research to define practices, parental options, and local control and flexibility

Abstract

- This study determined the criterion validity of the *Spelling Performance Evaluation for Language and Literacy* (*SPELL*), an assessment instrument for spelling and word-study skills.
- Previous research indicates that spelling and reading are related and instruction in one can lead to improvements in the other.
- Participants included 135 students in Grades 1 through 6. Participants' performance on *SPELL* was compared to their performance on two subtests of the *Woodcock Diagnostic Reading Battery* (WDRB) and the *Test of Written Spelling-4 (TWS)*.
- The results from Pearson-*r* correlations and a simultaneous multiple regression analysis imply that *SPELL* validly measures students' spelling abilities, decoding skills, and identification of sight words. *SPELL* can be used to identify word study goals in a variety of grades and settings.

Purpose of this study

- Determine the criterion validity of *SPELL* in relation to measures of reading and spelling.

  Why??

  To provide adequate instruction in literacy, a thorough individualized assessment should be completed prior to determining instructional goals. Does *SPELL* actually do this?

Participants

Grade:
1- 22
2- 27
3- 24
4- 28
5- 22
6- 12

Level:
1- 20
2- 12
3- 42
4- 52

Total: 135

Sex:
M- 76
F- 59

Students attend a laboratory school in Southwest Missouri, primarily Caucasian and middle or upper-middle class.

Statistical Treatment and Design

- Pearson-r Correlations: determine the relationship between IV and DVs by grade level, as a group, and by sex.
  - *SPELL* and *TWS*
  - *SPELL* and *WDRB WA (Word Attack)*
  - *SPELL* and *WDRB LWI (Letter Word Identification)*

- Simultaneous Stepwise Multiple Regression Analysis: determine which tests uniquely contribute to variance of the dependent measure.

Results

Correlations: significant positive relationships with all IV

Multiple Regression Analysis: *TWS-4* and *WDRB LWI* uniquely contribute to variance

SPELL: TWS-4 (All Ps)

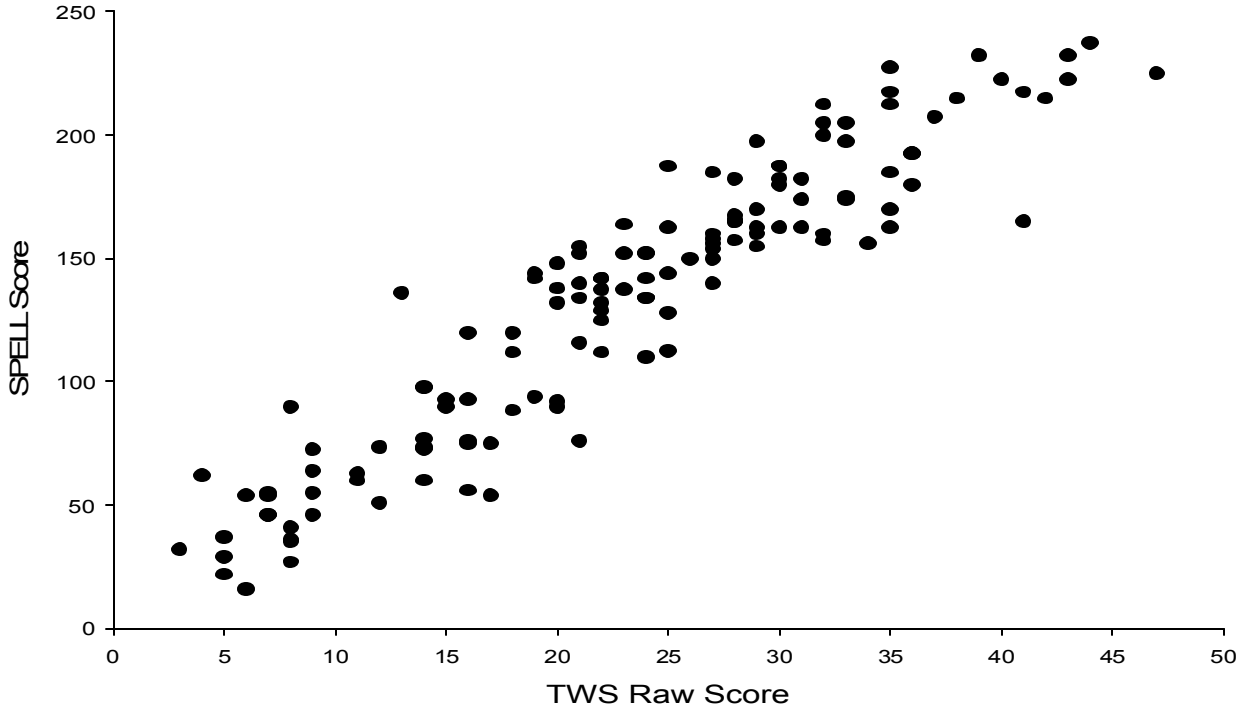
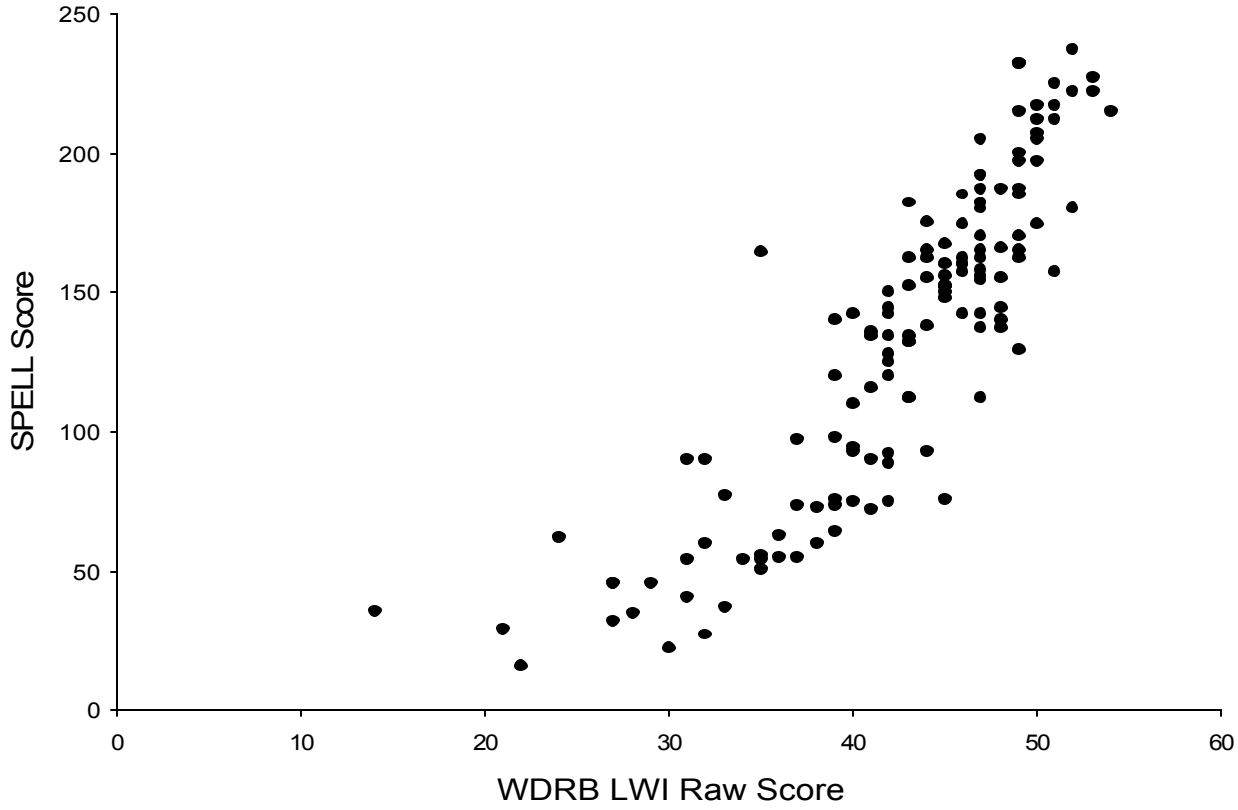


Figure 1. Correlation of *SPELL* Scores and *TWS-4* Raw Scores.

SPELL: WDRB-LWI (All Ps)



SPELL: WDRB-WA (All Ps)

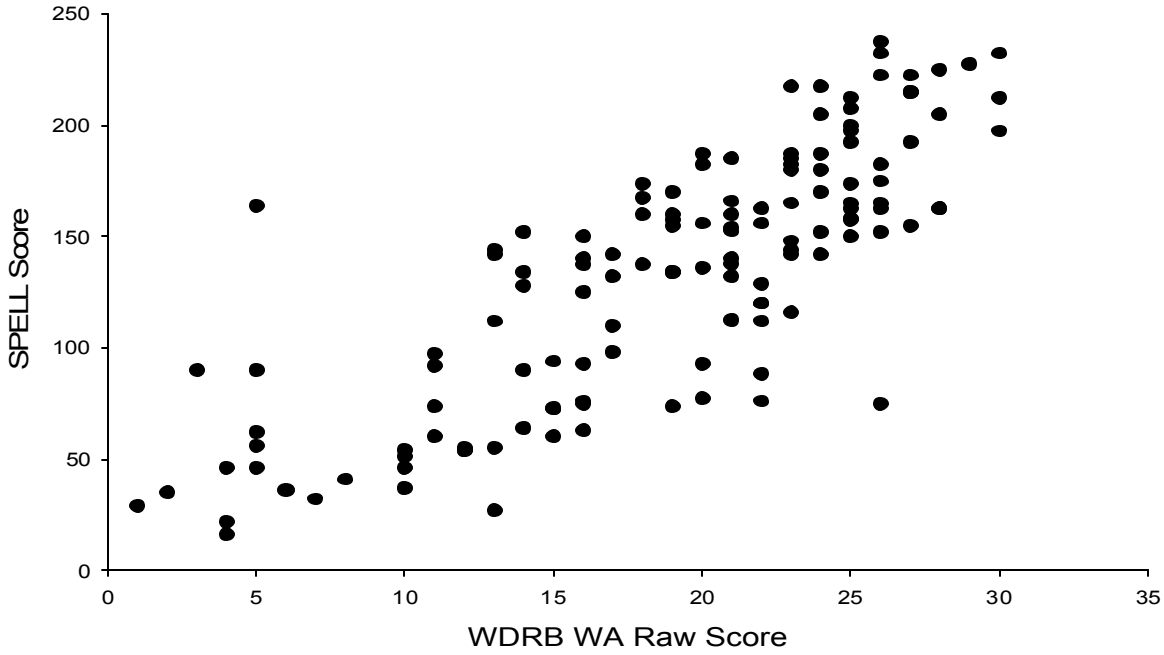


Figure 2. Correlation of *SPELL* Scores and *WDRB WA* Raw Scores

Multiple Regression Analysis

- r^2= amount of explained variation
- This type of analysis enters the independent variables in combinations and orders until the best equation is found
- *TWS-4* was entered first into the best equation, accounting for 88% of the variance
- *WDRB LWI* accounted for an additional 2% of the variance
- *WDRB WA* made no additional significant benefits.

Correlation Matrix

	TWS	WDRB WA	WDRB LWI	SPELL
TWS	1	.795	.854	.936
WDRB WA	.795	1	.860	.805
WDRB LWI	.854	.860	1	.868
SPELL	.936	.805	.868	1

Discussion

- Significant positive relationships between *SPELL* and other measures of reading and spelling.
- *SPELL* can measure spelling abilities, sight word recognition, and word-level decoding skills
- Significantly correlated across and within all grade levels; similar between sex
- *TWS-4* and *WDRB LWI* significantly contribute to variance measured by multiple regression analysis
- Lack of contribution by WA is interesting; perhaps related to style of literacy instruction used with participants