
The Relationship of Standardized Reading Scores to Children's Self-Perception as Readers

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While standardized reading tests may be used to validate a test of self-perception as a reader, the writers of this study have a different concern. If, in fact, there is a high relationship between the scores of standardized reading tests and children's self-perceptions as readers, we may need to seriously consider how we currently and carelessly use these standardized tests. In order to examine this relationship more carefully, the writers decided to conduct a study similar to Henk and Melnick's (1992) validity studies, but to further see what percentage of the variance in children's self-perceptions can be explained by knowing their standardized reading scores.

Reading educators have shown more interest in the last decade than ever before as to how affective factors influence children's academic achievement and behavior. Few, if any, would argue that attitudes, values, and beliefs regarding reading do not powerfully impact behavior. Kershner (1990) found self-perceptions predictive of remedial success in children with learning disabilities. In the 1992 NAEP findings (Mullis, Campbell, & Farstrup, 1992), children in all grades who reported reading more frequently for pleasure had higher average reading proficiency than those reading less frequently. In the 1994 NAEP data (Pinnell et al., 1994) pertaining to children reading aloud, children who were rated more fluent in reading were more likely to have read a book on their own in the previous month than were less fluent readers. Also in the 1994 NAEP findings, 64% of the fluent

readers indicated that their teachers allowed them time daily to read books of their own choosing. Attitudes, values, and beliefs about ourselves as readers do seem to matter.

Review of Literature

Reading educators have recently developed more valid and reliable ways to assess attitudes and self-perceptions related to reading. Most of these instruments are in the professional literature and in the public domain.

The Reader Self-Perception Scale (RSPS) (Henk & Melnick, 1995) is a new instrument that measures how intermediate-level (grades 4-6) children feel about themselves as readers. The RSPS is based on Bandura's (1977, 1982) theory of perceived self-efficacy which holds that one's judgment of one's ability in relation to a task will significantly influence behavior. This judgment can directly affect motivation, persistence, endurance, and habits in relation to the task.

The current interest in affective factors has produced new instruments such as the Elementary Reading Attitude Survey (ERAS) by McKenna and Kear (1990). The major difference between the ERAS and earlier instruments is the extensive norms made available with the ERAS for grades 1-6. Comprehensive data on validity and reliability were also presented with the ERAS.

The new RSPS differs from the ERAS in that the self-perception scale is more appropriate for grades 4-6 than for primary children. Primary children differ from intermediate-level children as to how they perceive the reasons for their achievement or lack of it. Research suggests that intermediate-level children tend to attribute their achievement or lack of it to their ability and not to chance (Nicholls, 1979; Ruble, Boggiano, Feldman, & Loebl, 1980). For example, intermediate-level children would be more apt to see low achievement in reading as an indication that they had low abilities for reading and were not hampered by poor teachers or unfortunate circumstances such as sickness on test days.

The RSPS is also more diversified in giving five different subscales of self-perception. General Perception refers to a quick assessment of oneself as a good reader. The Progress scale refers to how well subjects perceive progress being made in reading. The Observational Comparison scale gives perception of how well students are doing in comparison to others. The Social Feedback scale is a measurement of subjects' perceptions developed from the feedback given by teachers, peers, and parents. Finally, the Physiological States scale refers to students'

perceptions of their bodies' reaction to different reading tasks and situations.

Henk and Melnick (1992) determined the correlation between fourth, fifth and sixth grade students' scores on their Reader's Self-Perception Scale and conventional standardized achievement tests. The standardized testing was conducted using the *Iowa Test of Basic Skills, Form J* (1990) and the *Stanford Achievement Test, 8th ed.* (1988). The standardized reading achievement tests had been given at the end of the previous academic year before administering the RSPS. Henk and Melnick found statistically significant relationships between the RSPS subscales and both the Iowa and Stanford achievement test scores. Henk and Melnick offered the caveat that future applications of the RSPS depended on continued, systematic instrument development.

Cloer and Pearman (1993a) found that children in the primary grades had significantly better attitudes than middle-grade students in relation to recreational and academic reading as measured by the ERAS. Cloer and Pearman also discovered that the attitudes of the middle-grade children were significantly related to the attitudes of their teachers. One of the most troubling aspects of Cloer and Pearman's study was the decline in attitude with advancing grades. It seemed clear that time spent in school was hazardous to children's attitudes.

Cloer and Pearman (1993b) also found that middle-grade boys' attitudes toward academic and recreational reading dropped very significantly from primary-age boys. Middle-grade girls' attitudes toward recreational reading did not differ significantly from primary girls'. An interesting finding was that the 34 teachers in the study, 18 from grades 1-3 and 16 teachers in grades 4-6, held significantly more negative attitudes toward academic or school reading than toward recreational reading. The study also revealed that teachers' attitudes in the middle grades toward academic reading were significantly related to the boys' attitudes toward academic reading.

A question that provoked the research herein is whether or not students can identify their degree of reading achievement or lack of it. Is it unfortunate but necessary that standardized tests are given and students develop low self-esteem as readers? Miller and Yochum (1990/91) reported the perceptions of a sample of children in grades 1-8 with reading problems identified by two university reading clinics. Eighty-seven percent of these children showed an awareness of their reading difficulty. However, the majority of these subjects, 73%, had word-recognition problems. This does not answer the larger question as to whether or not children's standardized test scores inform them of

their abilities or lack thereof in authentic reading tasks involving literature read for real purposes under conditions that are congruent with real literary pursuits. Kids who cannot recognize words have reading problems and know it. Some kids, however, may not see standardized reading tests as similar tasks to their reading of young novels. Are these kids correct if they identify themselves as having low ability because they scored low on the standardized tests?

Henshaw (1991) interviewed children aged 11 and 12 and asked them to state whether they were good readers or not and if not, why not. She then placed them into three categories in relation to achievement using a reading-age versus a chronological-age discrepancy index. There seemed to be little relation between children's perceptions and their actual reading ability.

Method

The current study attempted to determine the relationship of students' standardized reading test scores to six different measures of students' self-perceptions pertaining to reading. The relationship was analyzed using samples of students from public and private schools, grades 4 and 6.

Subjects

The subjects for this study were 106 students in six classrooms of six different teachers of grade 4 in a public elementary school and 192 students from 12 classrooms of three public middle schools, grade 6.

A sample of 29 fourth-grade children from two classrooms in a Catholic private school and two classes of 22 sixth-grade children from a different Catholic private school rounded out the study. There was a total of 349 children, 15 teachers, and six schools involved with the study.

Procedure

Teachers voluntarily participated in the study. The total reading score in normal curve equivalents (NCEs) from the 8th edition of the *Stanford Achievement Test* was pulled from the previous year for all the fourth and sixth graders in public school. The test had been taken in the spring of the previous school year. The same was the case for the private schools, with the exception that the scores were from the *Iowa Test of Basic Skills*.

Means of students' Total Reading scores in NCE units were compared to six different means of readers' self-concepts as measured by

The Reader Self-Perception Scale (Henk & Melnick, 1995). Each of the five different scales plus a total of all five scales combined were analyzed. The five scales were General Perception, Progress, Observational Comparison, Social Feedback, and Physiological States. Students were given written statements on the RSPS and responded on a Likert scale from Strongly Agree to Strongly Disagree, 5 points to 1 point. There is only one statement for the General Perception Scale with a possible 5 points: "I think I am a good reader." The Progress Scale has 9 statements or 45 possible points. The Observational Comparison scale has 6 items or a maximum of 30 points. The Social Feedback and Physiological States scales have 9 and 8 statements respectively with maximum points of 45 and 40. The Total RSPS used in this study was a grand total of all five scales.

Pearson product-moment correlations were compiled to establish how much of the variance in the self-concept measures could be accounted for by knowing the previous year's standardized reading test scores of the subjects.

Results

Table 1 presents the number of subjects, means, and standard deviations for all variables in relation to all subjects in public and private schools, grade 4. The Total Reading achievement of these fourth-grade samples was above average, with a standard deviation large enough to show genuine variability within the sample. The General Perception means revealed agreement with the statement "I think I am a good reader." All the other mean measurements of reading self-concept fell exactly as the sample reported by Henk and Melnick (1995).

Table 1

Means and Standard Deviations for Reading and Self-Concept, Grade 4

Variable	Mean	SD
Public School Students*		
Total Reading	61.92	18.88
General Perception	4.09	1.02
Progress	40.38	4.33

Observational Comparison	20.49	5.29
Social Feedback	33.75	4.80
Physiological States	31.42	5.84
Total RSPS	130.12	17.02

Private School Students**

Total Reading	66.41	19.75
General Perception	4.17	.80
Progress	40.28	5.56
Observational Comparison	21.48	4.94
Social Feedback	32.17	6.45
Physiological States	33.00	5.65
Total RSPS	131.10	17.88

* n = 106

** n = 29

T-tests for independent means yielded no significant differences either on total reading NCEs or with any of the self-concept means when the samples from public and private schools were compared. The data were found to be consistent with Henk and Melnick (1995) and to be appropriate for studying the predictive power of standardized tests on self-concept of readers.

Table 2 gives the number of subjects, means, and standard deviations for all variables in relation to all subjects in private and public schools, grade 6. The Total Reading achievement of these sixth-grade samples was above average. The General Perceptions means revealed agreement with the statement "I think I am a good reader."

Table 2**Means and Standard Deviations for Reading and Self-Concept, Grade 6**

Variable	Mean	SD
Public School Students*		
Total Reading	60.27	20.75
General Perception	4.15	.90
Progress	38.52	6.15
Observational Comparison	20.80	5.11
Social Feedback	32.48	6.05
Physiological States	29.63	7.62
Total RSPS	125.59	21.78
Private School Student**		
Total Reading	67.36	14.75
General Perception	3.95	1.02
Progress	38.73	4.27
Observational Comparison	20.55	4.50
Social Feedback	32.32	4.16
Physiological States	30.09	4.84
Total RSPS	125.64	13.39

* n = 192

** n = 22

T-tests for independent means were used to analyze mean differences. No significant differences were found in any of the self-concept means when public and private school students were compared. The public and private samples showed average self-esteem as readers.

Table 3 gives the product moment correlation coefficients, probability, and the portion of the variance in self-concept scores (grade 4) accounted for by knowing the scores of reading achievement from the previous year, grade three.

Table 3

Correlation Coefficients for Reading and Self-Concept, Grade 4

Variable X	Variable Y	<i>r</i>	<i>p</i>	<i>r</i> ²
Public School Students*				
Reading	General Perception	.47	<.001	.22
Reading	Progress	.48	<.001	.23
Reading	Observational Comparison	.55	<.001	.30
Reading	Social Feedback	.31	<.001	.10
Reading	Physiological States	.43	<.001	.18
Reading	Total RSPS	.55	<.001	.30
Private School Students**				
Reading	General Perception	.29	.12	.09
Reading	Progress	.38	.04	.14
Reading	Observational Comparison	.59	<.001	.35
Reading	Social Feedback	.05	.69	.00
Reading	Physiological States	.10	.60	.00
Reading	Total RSPS	.31	.10	.09

* n = 106

** n = 29

The sample of public school students yielded significant relationships between every scale of self-concept and reading achievement as measured by *The Stanford Achievement Test*. The correlation between reading and the Observational Comparison scale alone, which measures the students' perceptions as to how they compare with other readers, accounted for 30% of the variance on that particular self-concept scale of these public school students. For the sample of private school students, the Total Reading score from the *Iowa Test of Basic Skills* accounted for 35% of the variance on the Observational Comparison scale. For this sample from private school, the correlation between reading achievement and the Progress scale was also statistically significant.

In Table 4, the relationship between reading achievement test scores and self-concept as measured by every scale of the RSPS was statistically significant for the sample of public school students, grade 6. The same was true for the private school students with the exception of one scale, Progress. In this sample of 6th-grade private school students, the standardized reading achievement test score accounted for 52% of the variance on the Observational Comparison scale of self-concept, 41% of the variance on the General Perception scale, and 30% of the variance on the Physiological States scale. Standardized reading achievement test scores were highly related to these self-concept scales.

Table 4

Correlation Coefficients for Reading and Self-Concept, Grade 6

Variable X	Variable Y	<i>r</i>	<i>p</i>	<i>r</i> ²
Public School Students*				
Reading	General Perception	.22	<.001	.05
Reading	Progress	.29	<.001	.08
Reading	Observational Comparison	.42	<.001	.18
Reading	Social Feedback	.15	.04	.02
Reading	Physiological States	.29	<.001	.08
Reading	Total RSPS	.33	<.001	.11

Private School Students**

Reading	General Perception	.64	<.001	.41
Reading	Progress	.09	.66	.00
Reading	Observational Comparison	.72	<.001	.52
Reading	Social Feedback	.42	.05	.17
Reading	Physiological States	.55	<.001	.30
Reading	Total RSPS	.64	<.001	.41

* n = 192

** n = 22

Discussion

Henk and Melnick (1995) stated that with additional research, they hoped that the RSPS will become a routine affective assessment, as common as well-known cognitive measures. This is also our desire. However, we wish to assert that while validating the instrument with research is a necessary and worthwhile endeavor, we must also examine the nature of this validity exercise. While it surely is true that children's self-concepts are related to their previous scores on standardized reading tests, we need also to be asking if this is problematic.

The IRA/NCTE Joint Task Force on Assessment (1994) has as its first standard the clear statement that an individual student's intellectual, social, and emotional well-being must be paramount in decisions regarding assessment. The rationale states that assessment must serve and not harm the individual student. The rationale states:

First and foremost, assessment must encourage students to reflect on their own reading and writing in productive ways, to evaluate their own intellectual growth, and to set goals. In this way, students become involved in and responsible for their own learning and better able to assist the teacher in focusing instruction. (p. 13)

This suggests that in the future researchers need to find ways to examine the relationship between students' performance on the RSPS and their performance on measures of reading that differ from what is measured by standardized tests. As we enter the 21st century, educa-

tors are using both cognitive and affective instruments to measure outcomes. As a result of affective measurement, teachers may feel obligated to give more frequent and concrete illustrations of progress and may want to give students more opportunities to read in situations that are nonthreatening. Educators might want to utilize more strategies such as echo reading, choral reading, multiple-response reading, etc. Perhaps, this research might serve as a reminder for teachers to daily model the enjoyment, appreciation, relaxation, and gratification that can be gained from reading. If so, one might see that the difference between the longitudinal effects of standardized reading testing versus evaluation of children's self-perceptions could be vastly different in terms of impact on individual classrooms.

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