

Review of **Teacher's School Readiness Inventory**, by Theodore Coladarci¹

The Teacher's School Readiness Inventory (TSRI), developed by Marvin L. Simner of the University of Western Ontario, is a five-item teacher rating scale designed to help prekindergarten and kindergarten teachers "make proper referral decisions" (scoring manual, p. 2) for children who are "at risk for school failure" (p. 12). Using a 5-point Likert-type scale, a teacher rates each child on distractibility, attention span, and memory span; verbal fluency; interest and participation; letter-identification skills; and printing skills. These five ratings are then summed to form a total score (the only score Simner recommends for decision making). Children receiving a TSRI total score at or below the established cutoff point are considered to be academically at-risk and, in turn, are referred either for additional testing or for immediate remediation, depending on the child's score.

DOCUMENTATION. The TSRI manual is quite impressive, especially in light of this instrument's brevity. Simner offers a clear and generally comprehensive treatment of the essential aspects of his instrument: (a) item development, (b) administration and use, (c) definitions and rating criteria, and (d) reliability and validity. In short, the author does a commendable job providing readers with the necessary information to evaluate the TSRI.

Importantly, Simner also repeatedly reminds the reader of the need to be cautious and circumspect when making judgments about any student's at-risk status. At one point, he proffers the following caveat:

We do not recommend using the TSRI as the sole means of identifying children who are at risk for school failure. Instead, we believe that it would be far more appropriate to employ the TSRI as the first stage in a two-stage early identification program. (scoring manual, p. 12)

Curiously, this admonition seemingly applies only to children falling at or just below the cutoff point, who, Simner correctly recommends, should undergo additional testing with such instruments as the Metropolitan Readiness Assessment Program or the McCarthy Scales of Children's Abilities. In contrast, teachers immediately should "refer for assistance" (p. 14) any child with a TSRI total score below 12. Contrary to the caveat above, however, this latter recommendation effectively renders the TSRI "the sole means" of identifying at-risk children--at least for this subset of children. In my view, additional testing would be necessary for any student flagged by a five-item rating scale.

STANDARDIZATION SAMPLE. All reliability and validity analyses were based on March data (1983-1984) from 581 prekindergarten and kindergarten children--two samples of each--and their 38 teachers from 22 public elementary schools in lower- and middle-income areas of London, Ontario. The relevance of this norming group for districts involving other curricula, grading practices, demographic groups, or geographic regions remains to be established. For this reason, particularly cogent is Simner's recommendation that users establish local norms--a process requiring at least 3 years--before using the TSRI for making referral decisions.

¹ Coladarci, T. (1995). Review of the Teacher's School Readiness Inventory. In J. C. Conoley & J. C. Impara (eds.), *The Twelfth Mental Measurements Yearbook* (pp. 1031-1033), Lincoln, NE: The Buros Institute of Mental Measurements.

RELIABILITY. Interrater reliability was established by having seven pairs of raters independently rate children in their respective classes, which resulted in a reliability coefficient of .86 for the TSRI total score. The reader is told that .86 is “within the range generally considered acceptable for tests that are to be used solely for screening purposes” (pp. 18-19), and Salvia and Ysseldyke (1985) are cited as support. In fact, Salvia and Ysseldyke argue for a minimum reliability of .90 where a test is to inform “important educational decisions, such as tracking and placement in a special class” (Salvia & Ysseldyke, 1991, p. 142). It seems to me that the TSRI is used for important educational decisions, insofar as children with TSRI scores below 12 are singled out, not for further (and more sensitive) assessment, but for immediate “assistance.” In my view, this consideration calls into question the adequacy of the TSRI reliability, particularly for children having TSRI scores below 12. (The absence of a reported standard error of measurement merely compounds the problem.)

VALIDITY. As Salvia and Ysseldyke (1991) state, “Since decisions made on the basis of readiness tests are so important, *the validity of the tests is crucial*” (p. 471; italics added). For this reason, I cover the TSRI validity information in some detail.

Content validity. The five items that make up the TSRI represent important aspects of school readiness. However, Simner provides no rationale for restricting the TSRI to these five items, other than a passing reference to supporting research. Rather than refer readers to a publication in which this rationale appears, Simner should bring the thrust of that argument directly into the TSRI manual.

Concurrent validity. The TSRI total score shows a strong relationship with the child’s June “class standing,” a mark provided by the teacher using a 12-point scale from D- to A+. For prekindergarten and kindergarten children alike, correlations between TSRI and class standing range from the mid-.70s to mid-.80s. As the author acknowledges, however, these correlations are difficult to interpret insofar as the same teachers provided both ratings. These values doubtless would be smaller had Simner secured independent ratings (Hoge & Coladarci, 1989).

Concurrent validity coefficients also were obtained between the TSRI and two standardized tests. Among prekindergarten children, the TSRI correlates .71 with the Developmental Tasks for Kindergarten Readiness and .69 with the Wide Range Achievement Test (WRAT); for kindergarten children, the TSRI correlates about .79 with the WRAT. These values suggest an acceptable level of concurrent validity, given these two criteria.

Predictive validity. Laudably, Simner attempted to secure longitudinal data on these 581 children through the second grade in order to assess predictive validity, “the most important type of validity for a readiness test” (Salvia & Ysseldyke, 1991, p. 488). For example, teacher marks in reading, written composition, and mathematics were obtained for many of these children at the end of their first- and second-grade years. Not surprisingly, correlations between teacher marks and the TSRI total score are slightly higher (a) when based on the earlier, first-grade criteria; and (b) when based on kindergarten children, irrespective of when criterion information was obtained. In any case, the correlations are modest, ranging from .39 to .62. Further, interpretation is rendered somewhat problematic by student attrition: Roughly 25% of the 581 TSRI children had moved before completing the first grade. For the second grade, the number grew to almost one half.

Simner also correlated the TSRI with the Woodcock Reading Mastery Test and the KeyMath Diagnostic Arithmetic Test, which were administered in the first grade. Correlations range from .52 to .58 for prekindergarten children and .57 to .65 for kindergarten children. As with the correlations involving teacher marks, these coefficients should be interpreted cautiously because of student attrition in the first grade, and also because roughly 20% of those children who were present were not tested.

Classification analyses. Does the TSRI permit accurate classification of children? To be sure, this is the most important question for a screening test. Using the most recent information available, Simner placed children in the “poor performance” category if they had not been promoted to the next grade or if they were assigned “to a slower or junior section of the next grade” (p. 24). These children generally received teacher marks in the D range. In contrast, the “good performance” category was reserved for children who later received overall-performance ratings of B- or higher. Simner then established the TSRI cutoff score that correctly identified at least 85% of the children in the poor-performance category (13 and 15 for the prekindergarten and kindergarten level, respectively).

In his Tables 3 and 4, Simner clearly reports these data for each of the four samples. For example, we see that 86% to 88% of poor-performance children had earlier received TSRI total scores at or below the cutoff point (“true positives”) and 88% to 96% of the good-performance children had fallen above the TSRI cutoff point (“true negatives”). In assessment argot, the TSRI thus demonstrates both “sensitivity” and “specificity.”

It follows, of course, that high “hit rates” also are obtained: 88% to 94% of children later demonstrating either “poor” or “good” performance in school had earlier received a TSRI total score consistent with their performance category. From these data, Simner concludes that “the overall predictive validity of the TSRI not only equals but often exceeds the predictive validity achieved by the majority of psychometric screening devices in use today” (p. 25).

This conclusion, however, must be tempered by at least four considerations. First, claims regarding TSRI validity would be strengthened considerably if these results were replicated, both with additional samples and from other sites. (One independent study, also from the Ontario region, was presented in an endnote and reported favorable, albeit less positive, findings.)

Second, because of student attrition, criterion information for some students was taken from first grade, kindergarten, or even prekindergarten. As Simner warns the reader, had second-grade data been obtained for all 581 children in the four TSRI samples, the validity results “might have been somewhat different” (p. 24). How different, of course, is not known.

Third, the high hit rates reported by Simner reflect, in part, his definition of “good performance” (B- or higher). But if the TSRI is designed to flag children who are “at risk for school failure” (p. 12), then one would expect that children falling above the cutoff score would not fail. That is, these children later should receive teacher marks of C- or higher. Calculations based on the comparison of this group and Simner’s poor-performance group yields hit rates of 71% to 88% across the four samples, which are lower than the figures reported in the manual. Curiously, Simner uses the relaxed definition of success (C- or higher) for classification analyses he reports elsewhere (Simner, 1987)--contrary to the methodology appearing in the TSRI manual.

Fourth, and most troubling, one half of all children identified by the TSRI as academically at risk actually went on to earn teacher marks in the C range or higher. This large percentage of “false positives” is not surprising in view of the modest correlations between TSRI and teacher marks (.39 to .62). If these data are generalizable, then one out of every two children who are flagged by the TSRI will be flagged unnecessarily.

CONCLUSIONS. The TSRI is a brief, inexpensive, and easily administered instrument for making referral decisions about prekindergarten and kindergarten children who are academically at risk. In school districts that do not regularly screen this population with more in-depth testing, the TSRI might be regarded as an attractive device for quickly identifying children for further assessment (once local norms have been established). Contrary to the recommendation of the author, however, decisions regarding “assistance”--whatever this term may suggest to the prospective user--should not be based solely on a one-page, five-item rating scale.

REVIEWER’S REFERENCES

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