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Rosie Webb Joels
University of Central Florida

Betty Anderson
University of Central Florida

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RELIABILITY OF READING INTEREST ASSESSMENT: AN APPLIED STUDY

Rosie Webb Joels & Betty Anderson
UNIVERSITY OF CENTRAL FLORIDA, ORLANDO

Learning is most efficient when there is a drive or personal curiosity stimulating the learner's active involvement. This motivation encompasses different factors within the affective domain, such as attitude, interest, and satisfaction.

Utilization of reading interests, i.e., appealing topics, in the instructional program is one way of arousing and maintaining students' motivation for learning tasks. Not only is personal involvement increased, but students' overall reading achievement has been found to be positively related to the amount of their recreational reading (Sauls 1971; Yap, 1977). Further, achievement, as reflected by comprehension scores within individual reading passages, has been found to be higher when the topics are of interest to the students (Bernstein, 1955; Vaughan, 1974).

Teachers who make decisions about students' recreational reading choices can more efficiently make those decisions if a measurement procedure has identified students' reading interests. Accuracy and subsequent usefulness of the measurement procedure is affected by many factors; among these factors is the stability of students' likes and dislikes among reading topics.

Stability of reading interests within an individual student is important for the long-range planning of reading materials for a classroom or for a library collection. The selection and acquisition of materials is costly in both time and money. Material acquired, therefore, should be of interest long after they have initially been identified as being among a student's, or students' reading interests.

The identification process of reading interests is improved when the measurement technique used has a high degree of reliability. For example, if students expressed their sentiments toward a series of reading topics today, to what degree would the assessment tool yield similar results at a later date? The differences in results may be influenced by many factors; among the influences are limited sampling, change in the task, or change within the individual (Thorndike and Hagen, 1977, p. 74).

The purpose of this study was to compare two of the influences affecting the reliability of reading interest assessment. Specifically, does change in students' reading interests influence test-retest reliability of an instrument used to assess those interests?

In addition, does the magnitude of that influence reduce the usefulness of such assessment for long-range planning?

Review of Literature

There have been over 300 studies on reading interests (King, 1967) with extensive research conducted on the topic during the 1960's and early 70's. By the end of the decade 1970-80, however, interest in this area of research was limited.

Berstein (1955) investigated the relationship between reading interests and comprehension. One hundred junior high school students read two stories controlled for readability and interest. One story emphasized action, suspense and a teen-age hero while the other was basically descriptive and lacked human action. The students were significantly more interested in the action story and also achieved significantly higher comprehension scores.

Using second-graders Yap (1977) studied the relationship between the amount of reading and reading achievement. Correlations were .84 and .77 between amount of books read and reading vocabulary and comprehension standardized test scores. In contrast, correlations between IQ and the vocabulary and comprehension scores were .47 and .49. The differences between these coefficients were statistically significant. Sauls (1971) also found significant relationship between the number of books students read and their reading comprehension levels.

Harris & Sipay (1975) stated that "it is difficult to make definitive statements regarding the reading interests of children." They note that common definitions of basic terms are not established in the literature and also that sampling techniques vary greatly. In a critical review of research, Robinson and Weintraub (1973) concluded that much research about children's reading habits has been criticized due to inadequate methods. They noted that the findings differ with the methods used. Verifying this inconsistency, Monson (1968) reported obtaining different results from the same students when two methods were used to gather data. A structured design using true-false and multiple choice format was compared with an unstructured design in which the subjects wrote their reactions in their own words.

Reliability is another question which needs to be raised when assessing children's reading interests, and it is an area which needs to be improved (Robinson and Weintraub, 1973). Noting that very few researchers have measured the reliability of the instruments used to measure children's interests in reading, Weintraub (1968) stated that determination of reliability is necessary if the findings are to be accepted.

Procedures

Subjects

The subjects for this study consisted of all the fifth graders in a small town of primarily agricultural interests in central Florida. Two elementary schools serve the total community. Data were collected on a total of 173 students. Seventy-one (71) of the students were from a school with self-contained classrooms with the remaining 103 subjects at a larger open space school.

All students who were present participated in the test administrations. One student was unable to read the survey form and it was read to him by one of the researchers. The group was approximately equally divided between males and females. Information on reading level of the subjects was available only from one school. Of these 71 students, 21 were judged by the teacher to be below average in reading achievement, 25 were average, and 25 were above average.

Instrumentation

Data were collected for this study using two parallel forms of a reading survey developed in an earlier investigation (Joels, 1978). From a pool of fictitious annotated titles, three items for each of six interest categories had been chosen for each form. The categories had been selected based on their use in earlier reading interest studies and on their ability to elicit strong positive or negative sentiment in those studies. The total interest inventory had been judged valid by a panel of professionals in the field of children's literature. The following criteria were used to judge the instruments' appropriateness: (1) suitability of reading level for fifth grade students; (2) mutual exclusivity of the categories; and (3) suitability of titles for interest categories into which they had been placed.

Administration

The Reading Interest Survey was administered to the subjects three times. Two administrations were in December. Form A was given first with form B used the following week. The final administration in May was form B.

All the administrations at both schools followed the same format. A brief explanation of the purpose of the survey was read followed by the directions. There was no time limit and the forms were collected as the students finished them.

Results of the Study

The product-moment correlation coefficients (Downie and Heath, 1974) were computed for each interest category using the summed title scores from each of the forms A and B. The correlation coefficients were derived also from forms A and B, administered over a six-month interval.

Table 1
Test Reliability as
Measured by Parallel Forms/Test-Retest:
One-Week Interval vs. Six-Months Interval

Reading interest category	1 week $r_{1\cdot2}$	36 weeks $r_{1\cdot3}$	difference
Fantasy	.67	.65	-.02
Love and Romance	.80	.76	-.04
Mystery/Adventure	.82	.74	-.08
Religion	.74	.64	-.10
Science	.65	.58	-.07
Sports	.81	.72	-.09

An examination of Table 1 reveals the two sets of coefficients for the two intervals of the administrations. Each category had a lower coefficient for the six-month interval than for the one-week interval. This reduction ranged from a low of .02 (Fantasy) to a high of .10 (Religion). These differences were not further analyzed nor tested for statistical significance.

The results indicate that there is a lack of stability in students' reading interests that can be measured in addition to the test-retest parallel form reliability of the instrument. This change in sentiment for individual students, however, does not appear to be large when reliabilities for one-week interval and thirty-six week interval are compared. It is concluded from this result that individual students' reading choices do not change markedly over a period of six months.

The categories were rank ordered after each of the three administrations. Table 2 reveals the category order that was common to all three administration results.

Table 2
Rank Order of Reading
Interest Categories (High to Low)

1. Mystery-Adventure
2. Fantasy
3. Religion
4. Love and Romance
5. Sports
6. Science

The rank ordering of the categories from the students' responses presents further evidence of the stability of reading interests within the total group. In each of the three administrations, identical rankings were obtained with Mystery/Adventure being the most preferred category and Science being the least preferred category.

While the correlation coefficients do not appear to be strong for the thirty-six week interval reliability, they do compare well to the reliabilities considered acceptable in the assessment of affective constructs (Vaughan and Sabers, 1977). Thorndike and Hagen (1977) state that reliability of measurement needs to be evaluated in terms of the accuracy necessary for decision making; the reliability needed for decisions about groups does not need to be as high as that needed for decisions about individuals while maintaining accuracy of conclusions.

The usefulness of reading interests assessment is not impaired by the change in students' reading interests across a thirty-six week interval. Thus, the decision making process for materials selections can be made with confidence that the reading-for-recreation needs of the total group and the individuals within the group will be met.

REFERENCES

- Bernstein, M.R. Relationship between interest and reading comprehension. Journal of Educational Research, 1955, 49:283-288.

- Downie, N. M. & Heath, R. W. Basic Statistical Methods (4th ed.). New York: Harper and Row, 1974.
- Harris, A. J. & Sipay, E. R. How to increase reading ability: A guide to developmental and remedial methods (6th ed.). New York: David McKay, 1975.
- Joels, A.R.W. Assessing children's interests: A methodological study of the reliability and comparability of instruments with differing response formats (Doctoral dissertation, Univ. of Arizona, 1978). Dissertation Abstracts International, 1978, 39, 831A. (Univ. Microfilms # 7813909).
- King, E. M. Critical appraisal of research on children's reading interests, references, and habits. Canadian Education and Research Digest, 1967, 12, 312-326.
- Monson, D. L. Children's test responses to seven humorous stories. Elementary School Journal, 1968, 68, 334-339.
- Robinson, H. M. & Weintraub, S. Research related to children's interests and to developmental values of reading. Library Trends, 1973, 22, 81-108.
- Sauls, C. W. The relationship of selected factors to the recreational reading of sixth grade students. (Dissertation, LSU, 1971). Dissertation Abstracts International, 1971, 32, 258A.
- Thorndike, R. L. & Hagen, E. P. Measurement and evaluation in psychology and education (4th ed.). NY: John Wiley, 1977.
- Vaughan, J. L. The effect of interest on the reading comprehension of good, average, and poor readers in grades four, six, eight, and eleven. (Dissertation, Univ. of VA, 1974). Dissertation Abstracts International, 1974, 35, 2846A.
- Vaughan, J. and Sabers, D. Factors in validating effective scales: An applied study. Journal of Reading Behavior, 1977, 9, 253-258.
- Weintraub, S. Research: children's reading interests. The Reading Teacher, 1968, 22, 655-659.
- Yap, K. O. Relationships between amount of reading activity and reading achievement. Reading World, 1977, 17, 23-29.