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THE FLORIDA KEY: A SCALE TO INFER LEARNER SELF-CONCEPT

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MANY in education and psychology have recognized the influence that a child's perceptions of himself have on his performance in school. A child who doubts his ability to learn in school becomes his own enemy.

Because of the apparent relationship between self-perceptions and school achievement, there seemed to be a need for a "scale" to infer learner self-concept which could be quickly and easily scored by a classroom teacher without training. It should not require the cooperation of the subject (as do self-report instruments) or involve the subject's awareness of being measured.

The importance of naturalistic measures is evidenced by the somewhat naïve reliance of many investigators on self-report. The difference is that the self-concept is "what an individual believes he is. The self-report on the other hand, is what the subject is ready, willing, able, or can be tricked to say he is. Clearly, these concepts are by no means the same [Combs, 1962, p. 52]."

The aim of the present study was to devise and validate a scale to be designated the "Florida Key" which Classroom teachers could use to infer pupils' self-concept as learners without relying on self-reports. Such a scale would provide the teacher with an increased sensitive awareness of each student's perception of himself as a learner. This awareness has important implications for improving pupil performance in school (Purkey, 1970).

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Method. The following procedures were employed in the development and validation of the Florida Key:

Procedure 1: Item identification and pilot testing. Available research data on self-concept were reviewed to identify the general classroom behaviors of pupils considered to possess positive and realistic self-images as learners. A random sample of elementary teachers was asked to evaluate these classroom behaviors in terms of their worth in inferring pupil self-concepts as learners. From these activities eighteen behavioral acts were isolated, described in written form, and juxtaposed within a rating scale to measure perceived frequency or occurrence. The items, which were arranged into factors as determined by factor analysis, are given in Figure 1.

All pupils in the 5th and 6th grades ($N = 180$) of an elementary school in North Central Florida, and all pupils in Quads 5 and 6 of an experimental elementary school in Northeast Florida ($N = 155$) were asked to rate themselves on the Short Form of the Coopersmith Self-Esteem Inventory (Coopersmith, 1967). Their teachers were asked to complete the Florida Key for each pupil.

A total of 335 pupils in the two elementary schools yielded twenty-five professed self-esteem statements as elicited by the Coopersmith Self-Esteem Inventory. Three-hundred fifty-seven Florida Key ratings were obtained on the same population, as more than one teacher rated several children.

Procedure 2: Validity and reliability. A validity study was done with Oklahoma teachers enrolled in a graduate course. These teachers were asked to rate their pupils on the dimensions of relating, asserting, coping, and investing. The teachers had not been exposed to the Florida Key and the ratings were to be subjective evaluations of placement of children on these dimensions based on school performance. The meaning of each dimension was presented in a manner to avoid terms and behaviors found in the Florida Key. One week later they completed the Florida Key on the same children using an unlabeled form of the instrument. Teachers were not informed of any relationship between the two instruments and conditions minimized any connections being drawn between the tasks. Among this group, four teachers were identified who were working in an appropriate grade range (3rd grade to 7th grade) for the analyses. These four teachers each rated 20 to 25 students.

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Figure 1.

FLORIDA KEY, ELEMENTARY FORM

This scale is to assist you, the teacher, in evaluating how the student perceives his or her "learner" self. Please select one of the following answers and record the number in the blank space.

NEVER: 0	VERY SELDOM: 1	ONCE IN AWHILE: 2	OCCASIONALLY: 3	FAIRLY OFTEN: 4	VERY OFTEN: 5

Name of Student to Be Evaluated _____ Teacher _____ Date _____

Compared with other students his age, does this student:

1. get along with other students? _____
2. get along with the teachers? _____
3. keep calm when things go wrong? _____
4. say good things about his school? _____
5. tell the truth about his school work? _____

Relating _____

6. speak up for his own ideas? _____
7. offer to speak in front of the class? _____
8. offer to answer questions in class? _____
9. ask meaningful questions in class? _____
10. look people in the eye? _____
11. talk to others about his school work? _____
12. join in school activities? _____

Asserting _____

13. seek out new things to do in school on his own? _____
14. offers to do extra work in school? _____

Investing _____

15. finish his school work? _____
16. pay attention to class activities? _____
17. do his school work carefully? _____
18. read in class? _____

Coping _____

TOTAL _____

A second validity study was conducted at a university laboratory school in Florida. Teachers who had used the Florida Key to assess learner self-concept of their students in kindergarten through eighth grade, were asked to choose five students who, "in your judgment *feel* the best about themselves as *learners*." The teachers were also asked to consider, when making their choice, whether the student had a "positive attitude toward school and willingness to participate in classroom activities" and were advised that "these students *may not necessarily* be the best students academically." Teachers were asked to choose the five stu-

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dents at the opposite end of the continuum, i.e., those who "feel badly about themselves as learners" and "have negative attitudes toward school." This categorization of students by the teachers was done six weeks following their use of the Florida Key.

Results. The data collected under Procedure 1 were used to ascertain a measure of concurrent validity with a self-report instrument. A comparison was made of the ratings of each pupil on the Florida Key with self-report as measured by the 25 items of the Coopersmith Self-Esteem Inventory (SEI).

The coefficient of correlation (.14) indicated little relationship of Florida Key total score with the SEI. This outcome was expected, as the 25 items on the SEI encompass four broad factors, only one of which relates to school and to learning activities. The coefficient of correlation between the "school" factor on the SEI and the Florida Key was .33, which was a statistically significant increase over the total score correlation. These relatively low positive correlations between the self-report and inferred measures should not necessarily be viewed as disclaimers to the establishment of validity. Learner self-concept is a trait that may well be a subset of the characteristics measured in the SEI. As Campbell and Fiske (1959) pointed out in their discussion of convergent and discriminant validity, a correlation between two traits may be due to common trait variance or to common method variance.

Through use of the same data, items were standardized within each teacher's ratings and were factor analyzed by a principal axes solution, rotated to the varimax criterion. Four factors were identified which accounted for 71 per cent of the total score variance and 92 per cent of the common factor variance (see Table). These four factors were labeled: (1) Relating, (2) Asserting, (3) Investing, and (4) Coping.

In addition, three teachers were identified who had rated the same eleven students. An index of reliability of .84 was obtained through using an analysis of variance procedure (Kerlinger, 1973). Coefficients of reliability employing the split-halves procedure were determined for all teachers. These coefficients ranged from 0.62 to 0.96. A split-halves estimate of reliability of total score across all teachers was found to be 0.93.

In Procedure 2, Oklahoma teacher ratings were compared with Florida Key scores. Differences in mean ratings among the teachers

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TABLE 1

Rotated Factor Loadings for Florida Key (Values below .400 omitted)

Item	I Relating	II Asserting	III Investing	IV Coping
1	.732			
2	.731			
3	.712			
4	.617	.538		
5	.616			
6		.800		
7		.772		
8		.766		
9	.400	.725		
10	.429	.604		
11	.500	.565		
12	.412	.533		
13	.410	.501	.524	
14		.562	.448	
15				.717
16	.481			.617
17	.464			.613
18		.481		.612

indicated the advisability of carrying out separate analyses for each teacher. Of the 16 correlation coefficients produced, ranging from .40 to .79, only two were not significant at the .01 level, (of these two, one was significant at the .02 level, the other at the .10 level.) The average correlation (using Fisher's transformation) was 0.62.

The validation study in the Florida laboratory school involved 27 teachers, each of whom chose five students as "feeling best about themselves as learners" and five who "felt badly about themselves as learners." The mean factor score in the four Florida Key factors for each of the two groups was used to determine a point biserial correlation coefficient. The mean total score was also calculated for each of the two groups and a point biserial coefficient of correlation was obtained. These coefficients ranged from .57 (Relating) to .71 (Coping) with the correlation for total score being .68, all of which were significant at the .01 level.

Conclusion. A simple scale entitled "The Florida Key" was developed which allows classroom teachers to infer learner self-concept of students. Data were collected and analyzed on approximately 1000 students in Florida and Oklahoma schools. Four factors were identified accounting for 92 per cent of the common

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factor variance. They were labeled (1) Relating, (2) Asserting, (3) Investing, and (4) Coping. The Florida Key evidences significant validity and reliability for the samples student.

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