In conjunction with a longitudinal study of the effects of the school environment on the self-concepts and mental health of first- and second-grade students, a primary level group-administered self-report self-concept inventory (PSCI) was developed. The PSCI, based on Pauline Sears' Self-Concept Inventory for middle grades, does not require reading skills. Administration requires two 15-minute sessions. Principle component analyses indicated that seven factors adequately account for the underlying variability of the PSCI. Therefore, two academic and five psychosocial subscales were formed. Test-retest reliability estimates for the seven subscales ranged from .38 to .73. (Author)
A SELF-CONCEPT INVENTORY FOR THE PRIMARY GRADES

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This research concerns the development of an inexpensive group administered self-concept inventory for preschool and primary grades. Administration of the inventory requires two group sessions of about fifteen minutes each. Respondents do not need skill in reading to complete the inventory. Development of the Primary Self-Concept Inventory (PSCI) was undertaken because a reliable and inexpensive multidimensional self-concept inventory for the primary grades could not be located.

The self-concept is an important construct in most, if not all, recent theories of personality. In her book, The Self-Concept, Ruth Wylie stated: "... all the theories of personality which have been put forth within the last two decades assign importance to a phenomenal and/or nonphenomenal self-concept with cognitive and motivational attributes (1961, p.2)."

Several theorists (including Combs and Snygg, 1959; Gordon and Combs, 1958; Fink, 1962; Landsman, 1962; Wylie, 1961) have addressed themselves to the task of defining the term "self-concept". To summarize their definitions, self-concept consists of those personal attributes which the individual perceives as being important, typical and fairly stable aspects of himself. The self-concept includes the self as the individual is known to himself, including his characteristics, abilities, values, goals, ideals and his perception of himself in relation to others and to his environment. The phenomenal self-concept refers to those aspects of the self-concept of which the individual is consciously aware. The majority of the research involving the self-concept has measured the phenomenal self-concept, and the present research does likewise.
Theorists have proposed that the person's perception of himself is strongly influenced by the successes and failures he experiences in his interactions with his environment (Erikson, 1959, Staats, 1972; White, R.W., 1960). The research literature contains abundant evidence of a positive relationship between students' achievement status in school and their concepts of themselves. Bledsoe (1967), Boudwin (1959), Brookover et al. (1965), Campbell (1967), Caplin (1968), Coopersmith (1959), Piers and Harris (1964), Sears (1963), Wattenberg and Clifford (1962) and Williams and Cole (1968) reported significant positive correlations ranging from .22 to .60 between measures of students' self-concepts and their achievement test scores. Only one of these studies, the one conducted by Wattenberg and Clifford, included students during their first three years in school.

Students' concepts of themselves in areas related to school may become stabilized by the time that the students reach the middle grades. Engel (1959) found a correlation of .53 between measures of self-concept obtained two years apart. She used an instrument to measure reliability which had a ten day test-retest reliability of .68. Her subjects, students in sixth and eighth grades at the time of the first testing, showed little change in their self-concepts over the two year period. Self-concept stability in the middle grades and beyond was also reported by Brookover and his associates (Brookover et al., 1965).

If students' concepts of themselves are influenced by their experiences in school, the students may develop their concepts of themselves as students during their first few years in school. Their experiences in the middle and subsequent grades may serve to reinforce and to maintain the stability of the self-concepts developed in the early grades.

Because most the research involving students' self-concepts has been conducted in fifth and subsequent grades, rather little is known about interactions between students' self-concepts and their school experiences in the early grades. Research investigating self-concept development in the primary grades may be scarce because adequate psychological measures for this level were either unavailable or too expensive for use with large samples. The PSCI was developed in an attempt to provide a reliable self-report self-concept inventory which could facilitate more extensive research involving the self-concept in the preschool and primary age groups.
The PSCI was based on the Self-Concept Inventory developed by Pauline Sears of Stanford University (Sears, 1963). The Sears Inventory is appropriate for students in the middle grades, approximately fourth through seventh. The Sears Inventory is a group administered self-report questionnaire designed to cover ten self-concept areas: physical ability, mental ability, social relations with boys, social relations with girls, personal appearance, social relations with the teacher, work habits, relations with others, general attitude toward self, and perceived status in individual school subjects. The Sears Inventory contains ten items in each of the ten areas, a total of 100 questions. The student makes three separate ratings for each item. He rates: (1) his satisfaction with himself, (2) his prediction as to whether he will or will not improve his performance, and (3) his position in comparison to the other members of his class. For example, one item is "Learning things quickly." On this item the student indicated: whether he is satisfied that he learns things fast enough or he would like to learn things faster (Rating 1; 2 choices); whether he expects to improve his learning rate during the school year or he expects that he probably will not improve (Rating 2; 2 choices); how he rates his learning speed compared with other students in his class (Rating 3; 5 choices: Very good, better than a good many, better than average, fair, not very good). Thus, the student makes three ratings on each of 100 items, a total of 300 responses.

Torshen (1969) administered the Sears Inventory to 400 fifth grade students. Analysis of these data indicated that twelve factors accounted for 77 percent of the variance of the Sears Inventory. The factors were interpreted using the a priori structure of the Inventory. The twelve factors corresponded to the ten self-concept areas and to the "improvement" and "comparison with peers" ratings. The "satisfaction" rating was not used in scoring the inventory because it was obtainable from the other factors (Torshen, 1969).

Examination of the Sears Inventory indicated that it was too long and many of the items were too complex for younger students. In consultation with several preschool and primary teachers, appropriate items were selected from the Inventory. Minor modifications in wording were made when necessary. The "improvement" rating scale was dropped because it was judged to be too difficult for younger students. The "peer comparison" rating was reduced from a five-choice to a three-choice rating.
The resulting first version of the PSCI contained 45 items. The student made two ratings for each item. The inventory was administered in two sessions. In the first session, the students responded to the 45 items by indicating their satisfaction with themselves. Here is a sample item for the "satisfaction" rating: "If you are happy about the way you play games in the playground, put an "X" in the box with the circle. If you are unhappy about the way you play games in the playground, put an "X" in the box with the square." In the second session, the students responded to the 45 items by indicating how they thought they compared with their peers (Rating 2; three choices, Better than a good many/ about the same/ not as good).

This first version of the PSCI was pretested with Kindergarten students in an urban school. The students were of lower and lower-middle socio-economic classes, and some spoke English as a second language. All of the students were able to understand and respond to all of the items in the allotted time. Interviews with the students and teachers provided evidence that the questions were meaningful to the students and the answers given by the students were characteristic of their behavior.

After pretesting, the first version of the PSCI was administered three times during one school year to about 120 middle-class urban and suburban first grade students. These data were subjected to the following analysis: First, the 45 responses on each of the two ratings were pooled to make a total of 90 responses. The 90 responses were factor analyzed. This analysis yielded two strong factors, one corresponding to each of the two ratings. On the basis of this first analysis, the data from each rating were analyzed separately. Principle components decomposition of the intercorrelation matrix obtained from each set of 45 items were obtained. Seven principle components were extracted from each of the two sets of 45 items. The same structure was obtained within each set. The remaining principle components were not considered since their corresponding eigen values were less than 1. The seven principle components were subjected to a normalized varimax rotation and the resulting components were interpreted in terms of the content and function of the items that were maximally correlated with the respective components. Multidimensional items were eliminated, and 24 items remained to form the seven subscales (components) of the two rating sets of the PSCI.
The 24 items were grouped into seven subscales which are almost identical to seven of the ten subscales of Sears' Self-Concept Inventory. Sears' subscales were interpreted on the basis of the a priori structure of her inventory. The principle component analyses of the PSCI confirmed the proposition that the underlying structure of the PSCI is similar to the a priori structure of those items of the Sears' Self-Concept Inventory which were included in the PSCI. On this basis, the seven subscales were named: Learning-Work Habits, Athletics, Personal Appearance, Relationship to Teachers, Relationship to Boys, Relationship to Girls, Relationship to Others in General.

Test-retest reliability estimates were obtained for the seven PSCI subscales of Rating 2 on a sample of 77 first graders. The two administrations of the PSCI used for these estimates were separated by a time interval of six months. The following test-retest reliability estimates were obtained: Learning-Work Habits, .53; Athletics, .70; Personal Appearance, .38; Relationship to Teachers, .46; Relationship to Boys, .73; Relationship to Girls, .63; Relationship to Others in General, .45.

On the basis of these analyses, the PSCI was accepted for use in a longitudinal study. This study will examine effects of the school environment on the self-concepts, mental health and peer relationships of first and second grade students.

Many recent educational developments, such as the open classroom, behavior modification and mastery learning are being implemented with the hope that favorable changes in students' perceptions of themselves will result. As is true with most innovations, many of the underlying propositions have yet to be confirmed by research. Since many of these propositions involve students' self-concepts, the PSCI may prove to be an extremely useful tool in future investigations.
REFERENCES


References


