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## ABSTRACT

Two instruments were used in this study to measure the "phenomenal self": a series of 20 statements, after which the subject checked either "like me" and "not like me," and a semantic differential inventory consisting of 9 concepts which were rated using 7 pairs of adjectives. The final sample of American Indian students for whom both instruments were satisfactorily completed consisted of 2007 youths (998 males, 1009 females) ranging in age from 8 to 20 years. In addition, a non-Indian control group consisted of 168 youths (92 males, 76 females). The working hypothesis was that the scores for the 2 instruments for each Indian student would correlate highly. A coefficient of reliability was computed by the split-half method for each instrument. For the purpose of assessing the validity of the instruments, the original split-half reliability estimates were used. It appeared that while the 2 instruments could not be said to have measured exactly the same theoretical construct (i.e., phenomenal self), they did appear to have measured aspects of the same constructs. The concurrent validity correlations were highest for Plains Indians, Southwest Indians, Northwest Indians and Eskimos, and non-Indian controls. The student inventory is appended. (LS)

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THE NATIONAL STUDY OF AMERICAN INDIAN EDUCATION

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FINAL REPORT

EDO 44212



Series III The Personal-Social Adjustment of American Indian Youth

No. 7      The Meaning and Validity of the "Phenomenal Self" for  
American Indian Students

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August, 1970

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## NATIONAL STUDY OF AMERICAN INDIAN EDUCATION

The attached paper is one of a number which make up the Final Report of the National Study of American Indian Education.

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The Meaning and Validity of the "Phenomenal Self"  
for American Indian Students

The construct of "self" has been the subject of psychological and sociological investigation ever since the writings of William James in the late nineteenth century. Theorists such as Freud, Mead, Fromm, Sullivan, Adler, Allport, Erikson, and Maslow have tended to view the self as an unconscious construct which mediates and influences all behavior but which is never known to the individual as a conscious entity. Other theorists, such as Rogers, Lecky, May, and Leary, have postulated the self-concept as a conscious configuration of perceptions known to the individual as he exists within a given environment. These two versions of the self-concept have been described by Smith (1950) as the difference between the ego and the self. The ego is a "non-phenomenal subjective construct representing a configuration of on-going processes, among which is the cognitive-perceptual function. Through exercise of this function, the ego "knows" among other things b) the self, a phenomenal subjective construct." (Smith, 1950, p.522). It is this phenomenal view of the self as a conscious awareness of who one is and how one stands in relation to his environment that has been most frequently studied, and it is this view that is adopted in this study. Various studies have referred to the "phenomenal self" in a number of different ways. For example, terms such as "self-esteem," "self-regard," "self-perception," "self-identification," "self-concept," "self-appraisal," and "ideal self" all refer to the "phenomenal self" in that each asks a person to describe his awareness of who he is, how he stands in relation to others, or who he would like to be. For this reason, in this paper these terms will be used almost interchangeably as referring to the construct of the "phenomenal self." At the same time, it should be clearly understood that these terms used to describe the "phenomenal self" are not intended to have the same meaning as other terms, such as Erikson's concept of "identity," Freud's notion of "ego," or Mead's concepts of "I" and "me," which fit better into Smith's description of "ego" as "non-phenomenal subjective constructs representing a configuration of on-going processes. . . ." As a working definition of the "phenomenal self," this study relied on Rogers' (1951, p. 136) statement that, "The self-concept or self-structure may be thought of as an organized configuration of perceptions of one's characteristics and abilities; the percepts and concepts of the self in relation to others and to the environment; the value qualities which are perceived as associated with experiences and objects; and goals and ideals which are perceived as having positive or negative valence."

Attempts to define operationally or measure the "phenomenal self" have produced a wide variety of tests and instruments, many of which are critically evaluated in Ruth Wylie's survey of the research in this area (Wylie, 1961). As she points out, however, operational definitions of the self-concept have seldom used common instruments whose reliability and validity have been adequately demonstrated. As a result, self-concept

studies have tended to produce a confusion of measuring instruments, most of which lack precision and validity, so that any confidence which might be placed in the inferences which are so often drawn from their results is severely undermined.

Studies involving American Indians traditionally have not dealt directly with the concept of "self," and those that have attempted to draw conclusions about the self-concept have stressed anthropological judgments by non-Indian observers, rather than Indian self-reports. The anthropologists, however, have pointed out a number of factors about the nature of the Indian self-concept which have been helpful, for they have noted the complexity of the self-concept for individuals who are non-Western in orientation, especially for those who live in what might be called cooperative societies, rather than competitive ones.

Dorothy Lee (1950) analyzed linguistic form and structure along with mythical material from the Wintu Indians of Northern California to discuss how Indian definitions of the self differed from white society's way of defining the self. She noted that white society's definition of the self relied upon a law of contradiction that said that the self cannot be both self and not self, both self and other. According to this law, the self excluded the other and led to the distinction of the self and society. Wintu philosophy, on the other hand, had no such law of contradiction; the notion of self did not exclude the other, so that it was appropriate to refer to the self in society. She also noted that the language of white culture described the self as an analytic, isolated concept which had aggressive, active, and assertive meanings. For white culture linguistic useage implied that the self was narrowly delimited, separated from its encompassing situation, and usually in a position of active control. Wintu language, however, did not contain a word for the self and implied that there were no clear boundaries between the self and its encompassing situation. The Wintu self contained the total person as he completely, or upon occasion partially, identified with the others around him. In most cases, where white society saw a one-way relationship between self and other, where the self was asserted upon the other, the Wintu saw a two-way relationship between self and other, where the self participated to some extent and was coordinate with the other.

Charles Hughes (1958) used his field work experiences along with participant observations to discuss factors which altered the self-definitions of Eskimo Indians on St. Lawrence Island in the Bering Sea off Alaska. He noted changes that had occurred since the Eskimos had become more dependent economically and socially upon the mainland, so that the mainland no longer supplied just material goods but also "basic criteria of choice and models for the identification of self." He concluded that changes in self-definition occurred when there was a conjunction in time of four basic factors, which he labeled "observation of fact and reasoned thinking," "contact with other systems of belief," "all types of stress," and "new opportunities for achieving security and satisfying aspirations." Unfortunately, Hughes did not go into detail about the distinction between an individual's self-concept and a society's self-definition, so that his work did not help us understand this relationship; however, his paper did contribute to the notion that whatever the Indian self was it was a complex concept which should be seen in the context of a total cultural setting.

Seymour Parker (1964) studied what he termed "ethnic identity" in two Eskimo villages, using participant observation and a story-telling instrument which was scored for expression of hostility, ethnic social distance, and attraction to western culture. His conclusions dealt with the impact of cultural change upon ethnic identity, leading him to the statement that ethnic identity would be negatively affected by exposure to western culture. The ethnic self-image would be devalued and hostility towards western society would emerge from a situation where individuals set new goals which they then perceived could not be reached. It was this process, rather than "acculturation" or "cultural confusion," which produced ambivalence towards both western culture and the Eskimo's own culture.

These three studies all used some concept which could be called a "self-concept" indicator, and they point to the varying ways in which the term has been defined by various studies. None of these used a psychological instrument to measure what this paper calls "phenomenal self," relying instead chiefly upon anthropological insights. Despite this, they pointed out that the separation of an individual's "self" from his social context, which white, western society has traditionally made, may not apply to Indian societies where greater stress is placed upon the individual's cooperation with society than upon his competition against others in his society. Another way to state this problem was that Indian cultures may not perceive the self as having distinct boundaries, as western society does, but may view the self totally within the context of society, so that self and society become blurred and meaningless as separate entities.

Other studies dealing with American Indians have made reference to constructs similar to what this paper calls the "phenomenal self"; however, none has systematically measured the "self" or added significant clarification to the issue of the meaning of the self for Indians. Several studies, for example Voget (1957), Boggs (1960), James (1961), Berreman (1964), and Ablon (1964), viewed the self as a variable influenced by cultural change and as a measure of acculturation to white society. None used a psychological index of the self, using instead field observers' comments with anecdotal examples of major points, and none attempted to define the boundaries of the self within Indian society.

Three other studies are worthy of note because they did use some form of psychological instrument to measure Indian personality, even though their major purpose was not to measure "self-concept." Randle (1951) used TAT stories to analyze sex identification among Iroquois women, noting that her Indian subjects had a stronger feminine identity than white women used as a comparison group. Chance (1965) attempted to measure "self-identification" among Eskimo Indians with the Cornell Medical Index questionnaire, using it as a scale of personal adjustment to compare with degree of cross-cultural contact; however, his stress was upon adjustment to cultural stress, rather than upon self-concept as a phenomenal construct. Helper and Garfield (1965) used a semantic differential instrument to study ten concepts with Sioux Indian adolescents and white adolescents in South Dakota and included "phenomenal self" items such as "me" and "myself as I would like to be." This study was the closest to other non-Indian "phenomenal self" studies that had been done and led to the conclusion that the semantic differential could be used successfully to measure differences between groups for certain concepts. Helper's main purpose was to relate

Indian and white SD responses to school achievement tests, where he found that high-achieving Indians were semantically more similar to white adolescents in their responses than were low-achieving Indians.

From these eleven studies of Indians that refer in some way to "self" constructs it is clear that only one (Helper and Garfield, 1965) made an attempt to measure the "phenomenal self" as a psychological variable. The others made major points out of what they viewed as the Indians' concept of self, but each used its own global description of the self and most imposed the non-Indian field worker's judgment upon the final evaluation of what the Indian self-concept was. There was no uniform definition of the self used in these studies and few used a measuring instrument that could be replicated with other groups, tested for reliability, or demonstrated to have construct validity.

Perhaps even more important than these shortcomings is the fact that there is little clarity about what place, if any, the self-concept has in the thinking of American Indians. Dorothy Lee's paper discussed this in some detail with reference to her linguistic analysis of one Indian group; however, most of the other studies assumed that the self existed for Indians in the same way that it was said to exist for white, western culture, an assumption which may not be valid. The questions of what is the meaning of the self and how distinct are the boundaries between the self and society thus have been raised but neither clarified nor answered by recent studies.

Before turning to this study and its results it was important to review the literature on the "phenomenal self" which is focussed upon white and black samples.

Snygg and Combs (1950), in their rejoinder to Dr. Smith, argued that the phenomenological approach to the study of behavior was preferable to other approaches because it offered the psychologist the opportunity to get at what they call "first order" constructs based upon empirical observation, rather than the confusion that surrounds "second order" constructs based upon theoretical formulations. As a "phenomenal" construct, the "self" would thus seem to be fairly easy to measure, and many studies have agreed with Snygg and Combs to the extent that they have relied upon "self" reports as a measurement of the "phenomenal self." In designing this study a number of such studies were referred to and used as guides to developing appropriate measuring instruments. In almost every case these studies used just one instrument of the self-report type as their index of self-concept.

Coopersmith's (1959 and 1967) "Self-Esteem Inventory," after which this study modeled one of its instruments, was used along with teacher behavior ratings to produce five groups of seventeen fifth graders each. For these children he discussed the "antecedents of self-esteem" by correlating self-esteem inventory scores with data from interviews with the children's mothers. Using a small group of 30 children, Coopersmith got a five-week test-retest reliability coefficient of .88. With another group of 56 children he found a three year test-retest reliability coefficient of .70. These test-retest reliability coefficients were obtained with small groups of children who were not necessarily in the sample for whom he obtained behavior ratings. As for the validity of his instrument, he seemed to assume face validity, and offered

no information about the consistency of the responses given by his subjects.

Rosenberg's (1965) interesting study of adolescent self-esteem among 5,024 high school students in New York State used a series of Guttman scales to measure self-acceptance, reasoning that high self-acceptance was equivalent to high self-esteem. He reported a test-retest reliability coefficient of .85 which was derived from a smaller study by Earle Silber and Jean S. Tippett. As for validity, Rosenberg relied on a contention that his instrument had face validity and that the statements used in his instrument reflected observed clinical indications of low self-esteem, such as depression, physiological indicators of neurosis, psychosomatic symptoms, and peer group estrangement, as reported by nurses for patients at the National Institutes of Health Clinical Center. While the analogy between the validity of his measure for subjects at the NIH Clinical Center and for high school students seemed tenuous, Rosenberg's data from his adolescent sample confirmed most of his hypotheses about self-esteem, hence that his statements about validity seemed to be substantiated.

Several recent studies have used semantic differential scales in order to measure self-concept. Davidson and Greenberg (1967) measured "self-appraisal" among fifth grade "disadvantaged" Negro children in New York. The "self" was directly measured by their own Self-Appraisal Scale; however, they also used a semantic differential inventory to get at attitudes towards authority figures, and included concepts such as "mother," "teacher," and "me." They presented no data about either the reliability or construct validity of their measures; however, an investigation of their correlation matrix for all their variables reveals virtually no correlation between the Self-Appraisal Scale and the Semantic Differential cluster that included "me" (Davidson and Greenberg, p. 96-97). In another recent study Soares and Soares (1969) investigated "self-perceptions of culturally disadvantaged children" with a semantic differential type instrument and reported differences between the self-esteem scores of "disadvantaged" and "advantaged" fourth through eighth graders. Their use of this one instrument did not include any estimate of its reliability and validity. Long, Henderson, and Ziller (1968) used the semantic differential to investigate the content and response set of the self-perceptions of elementary school children in Maryland, including good reliability data but almost no discussion of the construct validity of their instrument as a measuring device for the "phenomenal self."

It seemed clear that while there have been many attempts made to define and measure the "phenomenal self," there still remained serious questions about the exact nature of the "self" and the most reliable and valid way to go about measuring it. In the case of American Indians these problems have been accentuated by the failure of most studies to attempt seriously to define the boundaries of the self-concept within non-western, cooperative societies. Studies of American Indians thus have not only been "culture-bound" in the sense of using instruments which were designed for non-Indians but also in the sense that they used theoretical constructs which have not been shown to clearly exist in Indian society. The assumption has been made in most instances that, since the "phenomenal self" as an organized configuration of conscious perceptions of one's characteristics and abilities seems to exist for members

of western culture, the same "phenomenal self" must also exist for members of American Indian society. As Dorothy Lee helped us to see, this assumption must be challenged and the nature of the "phenomenal self" for Indians more carefully studied.

The purpose of this study was to attempt to improve upon some of the methodological shortcomings of earlier self-concept studies and to investigate the nature of the self-concept among American Indians. We sought to do this by measuring the "phenomenal self" as a psychological variable, using two conventional, and admittedly culture-bound, self-report instruments which were administered to American Indian students as part of the National Study of American Indian Education. The basic concern of this study was to establish the reliability and concurrent validity of the two measures, so that the nature of the Indian self-concept and its relationship to other factors might be better understood when reported in other papers.

### Method

Two instruments were used in this study to measure the "phenomenal self," and both are reproduced in Appendix I and II of this paper.

The first instrument was a series of twenty statements after which the subject checked one of two places marked "like me" and "not like me." The statements referred to school work, feelings about the home, peer relations, and general feelings of competence. Both positive and negative sentence forms were used to avoid response set and four items were repeated in different form as a check on consistency of response. The positive responses: i.e., those reflecting positive self-regard, were scored "1" and non-positive responses were scored "0", so that a total score was obtained for each subject with a possible range of zero to twenty. This total score was used as the first measure of "self-esteem." This first instrument was modeled after Butler and Haigh's (1954) Q-sort test of phenomenal self-regard and was adapted from the version of this instrument developed by Coopersmith (1959 & 1967).

The second instrument was a semantic differential inventory, consisting of nine concepts which were rated for seven adjective pairs. The concepts used were "myself," "my home," "Indians," "my future," "this school," "teachers," "tribe's way of life," "white people's way of life," and "dormitory." The adjective pairs were "good - bad," "worthless - valuable," "weak - strong," "happy - unhappy," "lazy - active," "smart - dumb," "friendly - unfriendly." The adjective pairs were deliberately selected to stress Osgood's "evaluative" factor (5 pairs), while less stress was placed upon the "potency" (1 pair) and "activity" (1 pair) factors. This was done in order to measure the value placed upon the self as a concept having a positive or negative valence for the individual, and conform with recent studies that report that children's semantic differential responses seem to be most heavily weighted on the evaluative factor (DiVesta and Dick, 1966; Maltz, 1963). Each adjective pair had a six-place scale and was scored from one to six with "one" being the

more positive score, indicating higher positive self regard. The mean value of the scores for the seven adjective pairs for the concept of "myself" was used as the second measure of self-concept.

These two instruments were designed to provide two separate, and hopefully complementary measurements of the Indian student's "phenomenal self." The twenty statement self-esteem inventory attempted to ask the subject directly about his perceptions of himself: i.e., whether he felt the stated situation was "like me" or "not like me." In this way the subject's feelings about his relationship to family, peers, and school were measured in a forced-choice fashion. It is common for the answers to such direct questions to suffer in accuracy due to a subject's attempt to give socially desirable answers in order to present himself in the most favorable light and due to a subject's tendency to exhibit defensive behaviors by deliberately falsifying an answer when a question provokes strong feelings of threat and anxiety. An additional problem is that students with low reading ability might not understand the statements or might misread items, so that the accuracy of the final score would be decreased. It was hoped that the semantic differential inventory would overcome some of these problems by providing a measure of the "phenomenal self" which was less direct, more abstract, and which involved less reading.

The theory of the "semantic space" and its operationalization in the semantic differential scale developed by Osgood, Suci, and Tannenbaum (1957) has been shown to provide fruitful results when used across cultures and language groups (Kumata and Schramm, 1956; Kumata, 1957; Triandis and Osgood, 1958; Tanaka, Oyama, and Osgood, 1963; Osgood, 1964). In all of these studies the three factors of semantic space: evaluation, potency, and activity—have been shown to account for most of the variance in semantic differential responses, regardless of culture or language. In addition, two studies of American Indian subjects (Suci, 1960; Helper and Garfield, 1965) have shown that the semantic differential instrument secures responses which can be interpreted with Indians of the Southwest and Northern Plains states. Given this evidence for the cross-cultural similarity of the "semantic space," this study used an English language version of the semantic differential for all Indian students on the ground that, while some of the students were truly bilingual and all lived to varying degrees in two cultures, all were students in English-speaking schools and an English language measure of the "phenomenal self" would be a controlling device for comparing the self-concept of one Indian group with that of another. Nevertheless, the fact that this study used English language instruments should be noted, since it is possible that attributes of the "phenomenal self" were confounded with varying attributes of the English language for those students whose original language was not English.

Both instruments were administered at the same test session. In most cases they were administered to classroom groups by trained examiners from the National Study of American Indian Education. The examiners explained the instrument, read the instructions out loud, and gave examples on the blackboard when possible to insure that the subjects understood the task. If questions about procedures arose during the taking of the test, they were answered, and in group situations examiners walked around the classroom to correct any misunderstandings that seemed to exist. For elementary school subjects a special

set of instructions were devised written in simpler language. Special emphasis was placed upon the fact that these inventories were not part of school work and would not be seen by teachers or principals in the subject's school. In some cases, where subjects were also given additional interviews, the inventories were administered individually during the interview session. Since each inventory was labeled with the words "National Study of American Indian Education," no attempt was made to disguise the nature of the study. It was pointed out that this was a government supported study to find out how Indians and white children felt about some issues; however, no mention was made of "self-esteem" and the test booklets were labeled "Student Inventory A" and "Student Inventory C." The design of the study called for testing the students in grades 5, 8, and 11-12. Since most of the schools were small, all students in these grades were included, and in some cases, grades 6 and 9 were included to obtain greater numbers. In the few cases where enrollments were large, one or more classrooms were omitted, with care taken to secure a cross-section of students according to academic achievement.

Once protocols were completed and collected they were screened to eliminate any which were incomplete, double checked, or inconsistent. This initial screening resulted in about 10 percent of the semantic differential protocols being dropped. As a check on consistency of response, four items on the Self-Esteem Inventory were repeated in different form, and any protocol which had an inconsistent scoring on more than two of these four pairs of items was dropped from the study. This consistency check resulted in about 20 percent of the Self-Esteem Inventory protocols being excluded from the data analysis. Contrary to expectations, older age group subjects' protocols were eliminated for these reasons as often, if not more often, than younger age group subjects' protocols. The elimination of data presents almost as many problems as it solves, since the researcher is left with questions such as--What about the subjects who were not included in the data analysis? Would they change the final conclusions of the study, if data had been collected successfully from them? And why did they not complete the protocols satisfactorily? This study did not attempt to go back to these students and explore the answers to these questions. However, while there were many possible reasons why these students did not complete the instrument satisfactorily, ranging from simple problems such as not understanding instructions in the group setting, through more complex reasons such as resentment of school or hostility towards researchers, to sophisticated reasons of defensive psychological behavior or inability to conceptualize a "self-image," we preferred to view the rejected protocols, especially Self-Esteem Inventory protocols, as resulting primarily from low reading ability and a lack of attention being given the instruments.

## Sample

The final sample of American Indian students for whom both instruments were satisfactorily completed consisted of 2007 youths, 998 males, 1009 females, ranging in age from eight to twenty. In addition, a non-Indian control group was included, consisting of 168 youths, 92 males and 76 females.

The groups whose scores are reported here were the following:

Plains Indians. Five Indian communities (Blackfeet, Sioux, Navajo) studied by the University of Colorado Field Center. 253 boys and 242 girls in the age-range 8-20 inclusive.

Southwest Indians. Ten Indian communities or schools (Pima, Papago, Apache, Hopi, Laguna, Acoma, Navajo) studied by the University of Arizona Field Center. 395 boys and 364 girls, aged 8-20.

Northwest Indians and Eskimos. Four Indian and one Eskimo communities or schools (Quinault, Makah, Tlingit, Eskimo) studied by the San Francisco State College Field Center. 186 boys and 143 girls, aged 8-20.

Minnesota-Wisconsin Indians. Three schools in Wisconsin and two in Minnesota (Chippewa, Menominee, Sioux) studied by the University of Minnesota Field Center. 97 boys and 85 girls, aged 8-17, mostly in schools where the great majority of students were Indian. There was also a junior high school in Minneapolis, called School C, with 21 Indian boys and 25 Indian girls, who were in the minority in this school, and are reported as part of the Urban Indian group.

Lumbee Indians (North Carolina). Two Indian schools in Pembroke County (North Carolina) with 26 boys and 31 girls, aged 8-17. These were studied by the North Carolina State University Field Center.

Oklahoma Indians. Two communities in north central Oklahoma, with a minority of Indian students (Pawnee and Ponca), 26 boys and 39 girls. These were studied by the Oklahoma State University Field Center.

Urban Indians. Students in several elementary schools and a high school in Chicago, with 59 boys and 55 girls, age 8-17, studied by the University of Chicago staff; and 21 boys and 25 girls, age 12-17, who were students at a junior high school in Minneapolis, studied by the University of Minnesota staff. All of these Indians were in a minority among students at the schools they attended.

Chicago and Colorado Non-Indians (Controls). White, Black, and Oriental students in the same schools studied by the Chicago research staff and white students in the same schools studied by the Colorado staff, with 87 boys and 75 girls, age 8-17.

## Results

If Indian students had a "phenomenal self" as defined by the two instruments used in this study, it was expected that the results of these two separate instruments would correlate with each other to a relatively high degree, certainly to a degree significantly greater than zero. Thus, the working hypothesis was that the scores for the two instruments for each individual Indian student would correlate highly. In this sense, this study sought to determine the "concurrent validity" of the two instruments as measures of the "phenomenal self," as described by Cronbach (1960) and Cronbach and Meehl (1955).

In order to estimate the concurrent validity of the two measures it was first necessary to estimate their reliability. This was done in an early study of 334 Indian students who attended school in Arizona. Limitations of geographical distance and expense made a test-retest estimate of the two instruments' reliability impractical, so a coefficient of reliability was computed by the split-half method for each instrument. The twenty statements of Inventory A were randomly divided into conceptually equal halves of ten items each. For the semantic differential Inventory C the split-halves consisted of word pairs for the concept "myself." The first half were the adjective pairs "good - bad," "valuable - worthless," and "happy - unhappy," while the second half was made up of the adjective pairs "smart - dumb," "friendly - unfriendly," and "strong - weak." It should be noted that since there were seven adjective pairs used for each semantic differential concept, the construction of split halves for reliability testing made it necessary to exclude one adjective pair. The choice of which pair to drop was based on the fact that of the two factors represented by only one adjective pair each, the "strong-weak" pair, representing the "potency" factor had more loading on "evaluation" than the "active-lazy" pair, representing the "activity" factor (Osgood, 1957, pp. 53-61). Hence, the adjective pair "active-lazy" was omitted from the split-half analysis, leaving split halves that were approximately equal in terms of the representation of Osgood's semantic space factors.

The correlations for the mean scores of the split halves of each instrument are given in Table I according to the four age groupings of the sample.

## Test-Retest Calculation of Reliability (Note added October 2, 1970)

Approximately 18 months after the initial administration of the two self-concept measures, students who had been tested in grades 5 and 8 were retested in grades 6 and 9 at one school in the Plains Indian area. Thirty-four Indian students were included in this retested group and made it possible for us to estimate the reliability of the two instruments by correlating initial scores of these students with their scores after eighteen months. For these students the test-retest reliability coefficient for the Twenty Statement Self-Esteem Inventory was  $+0.28$ , while the test-retest reliability coefficient for the semantic differential concept "myself" was  $+0.34$ . These coefficients were lower than the split-half reliability coefficients reported in this paper. It was interesting to note that the mean post-test scores for this group were more positive; i.e., the Indian students in this one school rated themselves higher in "self-esteem" at the end of the 18 month period than at the beginning, a change which contradicts most studies' findings that the "self concept" is stable over time.

For the purpose of assessing the validity of the two instruments it was decided to use the original split-half reliability estimates. First, split-half estimates were available for all age groups and for a large sample. Second, it was felt that the split-half estimates made from the data collected at one point in time were more accurate than the test-retest estimates made over a relatively long period of time, such as a year and a half. Hence, the split-half reliability estimates given in Table I were used to evaluate the validity of the two instruments.

Table I

Split-half Reliability Coefficients for Twenty Statement  
Self-Esteem Inventory and Semantic Differential Concept  
"Myself" by Age Groups

Age Group	N	Twenty Statement Self-Esteem	Semantic Differential "Myself"
1. 8-11 years	35	.391	.340
2. 12-14 years	105	.533	.474
3. 15-17 years	105	.654	.620
4. 18-20 years	94	.603	.362

These figures revealed that the reliability of the two instruments increases with age for each student group, except the oldest, with reliability of the twenty statement self-esteem inventory being higher than the semantic differential for each age group. More important than these observations, however, was the general point that the split-half reliability correlations were not high, ranging from a low of .340 to a high of .654. The meaning of these low reliability coefficients was that subsequent concurrent validity correlations of the two instruments were attenuated by errors in the reliability of the two instruments, so that "true" concurrent validity correlations were actually higher than the correlation figures indicated. This problem is discussed in greater detail below.

To measure the concurrent validity of the two instruments all subjects' scores on the two instruments were studied by product moment correlation coefficients for age group and sex. These results are given in Table II.

Table II

Product Moment Correlations of Mean Scores of Twenty Statement Self-Esteem (Inventory A) and Semantic Differential (Inventory C) Concept "Myself" by Age and Sex<sup>1</sup>

	M a l e s			
	(N) 8-11	(N) 12-14	(N) 15-17	(N) 18-20
Plains Indians	(67) .47****	(83) .19*	(60) .30***	(32) .41***
Southwest Indians	(47) .58****	(125) .36****	(111) .23***	(112) .47****
Northwest Indians & Eskimos	(15) .54**	(47) .02	(77) .19*	(47) .30**
Minnesota-Wisconsin Indians	(11) .50*	(56) .28**	(30) .06	
Urban Indians	(11) .41	(44) .40****	( 4) .52	
Non-Indian Controls	(39) .41****	(26) .50****	(22) .77****	
	F e m a l e s			
	(N) 8-11	(N) 12-14	(N) 15-17	(N) 18-20
Plains Indians	(75) .34****	(85) .55****	(73) .48****	(20) .63****
Southwest Indians	(45) .33**	(132) .30****	(102) .38****	(85) .46****
Northwest Indians & Eskimos	(10) .67**	(42) .18	(71) .45****	(20) .64****
Minnesota-Wisconsin Indians	(11) -.02	(55) .54****	(19) .42*	
Urban Indians	(10) .34	(37) .25	( 8) .04	
Non-Indian Controls	(24) .36*	(21) .52***	(30) .42***	

\* p  $\leq$  .05  
 \*\* p  $\leq$  .025  
 \*\*\* p  $\leq$  .01  
 \*\*\*\* p  $\leq$  .005

<sup>1</sup>Since one instrument was scored with a high numerical score indicating high self-esteem, while the other was scored with a low numerical score indicating high self-esteem, the actual correlations were negative in sign; however, since the true relationship of the two measures is positive, Table II reports the correlations as positive.

These correlations, however, were attenuated by errors in the reliability of the two instruments, so that the actual correlation of the two instruments, or the correlation of the "true" scores, could be estimated by correcting each correlation for its degree of reliability according to the Spearman "attenuation formula"

$$p(T_x, T_y) = \frac{p(xy)}{\sqrt{p(xx') p(yy')}}$$

where  $p(T_x, T_y)$  is the "dis-attenuated" correlation, or the correlation of "true" scores for  $x$  and  $y$ , while  $p(xy)$  is the attenuated correlation of  $x$  and  $y$  and  $p(xx')$  and  $p(yy')$  are the split half reliability coefficients for  $x$  and  $y$ .

The reliability coefficients, however, contained additional sources of variance because of the way the split halves were made up. Because of this additional variance the reliability coefficients tended to underestimate the reliability of the two instruments. With such underestimated reliability coefficients a rigid application of the attenuation formula, using the figures from Tables I and II, would have resulted in an overestimation of the "dis-attenuated" correlations.

To illustrate this point, the upper and lower limits of the "true" relationship were estimated by applying the attenuation formula to the correlations for Plains Indian males and Southwest Indian females, ages 12-14 and 15-17, ages which produced the highest reliability coefficients. This resulted in "dis-attenuated" correlations for Plains Indian females of +1.09 and +.75 and for Southwest Indian males of +.72 and +.36. Thus, while the attenuation formula could not be applied literally, because in at least one case it resulted in an overestimate of the true relationship, the principle of attenuation theory could be used to infer that the true correlations between the two instruments' scores were higher than the figures given in Table II. The lower and upper limits of the correlations were estimated to be +.30 and +.80, given the influence of the reliability coefficients upon the correlations.

The results of Table II must be interpreted within the framework of the effect of the reliability of the two instruments, an effect which tended to lower the correlations reported from what the "true" relationship between the two instruments could be said to be. In light of this, there appeared to be a positive relationship between the two instruments which was significantly greater than zero in most cases. Using the estimates of what we could expect the lower and upper limits of the correlations to be, the correlations were high enough to lead to the conclusion that the two instruments had a good degree of concurrent validity for most of the Indian groups. Two Indian groups were too small in number to be included in Table II by age group. Of these two, Oklahoma Indians as a whole appeared to have a good degree of concurrent validity with attenuated correlations of +.25 to +.63, while North Carolina Indians appeared to have a low degree of concurrent validity with attenuated correlations ranging from -.24 to +.47. The North Carolina Indians were a notable exception to the general rule that the instruments seemed to have concurrent validity.

It appeared that while the two instruments could not be said to have measured exactly the same theoretical construct; i.e., the "phenomenal self," they did appear to have measured aspects of the same construct, so that we could infer that such a construct existed. The concurrent validity correlations were highest for Plains Indians, Southwest Indians, Northwest Indians and Eskimos, and Non-Indian Controls, so that we could say that these groups had the most definite sense of a "phenomenal self" as distinct from other societal factors. There did not appear to be any significant sex or age differences in these findings; there were fluctuations in the correlations by both sex and age; however, these fluctuations were neither significantly large nor consistent in direction.

### Conclusions

The first conclusion drawn from this study was that it was possible to define the construct of the "phenomenal self" operationally with English language instruments that were originally designed for white samples and obtain results with American Indian students which appeared to have concurrent validity, indicating that the instruments did measure self-concept among American Indian students.

At the same time the results of this study revealed that the concurrent validity of the two instruments varied from one Indian group to another, so that it appeared that the "phenomenal self" was not measured to the same degree for every group by the two instruments. This fluctuation led to the second conclusion that the nature of the "phenomenal self" was not the same for all Indians and that the cultural context of an Indian group was a significant factor in determining the degree to which our two instruments succeeded in measuring the self. It seemed that some Indian cultures had a more clear-cut sense of their "phenomenal self," perceiving clear boundaries between what was individual and what was societal. The most important issue seemed to be the degree to which a culture had a sense of a coherent "phenomenal self" that was defined by perceived boundaries of what was self and what was other. The coherence of the self and the nature of the boundaries between self and others emerged as the most important factors in determining the nature of the "phenomenal self."

In Indian societies that stress cooperation between individuals, with great emphasis being placed upon such values as harmony, sacrifice, and reciprocity, the boundaries between self and others are more likely to be blurred and the self-concept more likely to be diffuse and incoherent, so that the "phenomenal self" would be difficult to define and measure. In other societies that stress competition between individuals, with emphasis upon such factors as achievement, power, and assertiveness, the boundaries between self and others are more likely to be distinct and the self-concept more likely to be stable and coherent, leading to a definite "phenomenal self" concept. The language which a culture uses may provide important insights into whether a culture is cooperative in this sense or competitive; however, linguistic analyses alone, such as those proposed by Whorf and demonstrated by Dorothy Lee, cannot be said to provide a total picture of what conceptions a society holds. It is not the

belief of this study that language determines the manner in which people think and behave, for much of a person's thought, especially in the area of the "phenomenal self," tends to be amorphous and non-verbal. In fact, it is just this problem of measuring the "phenomenal self" with written language instruments which makes the psychologist's task so difficult. But the fact that language may not be the best method of measuring the "phenomenal self" does not mean that a given person or culture does not have a "phenomenal self."

Finally, while this study was able to establish concurrent validity between its measures of the "phenomenal self," it was clear that the measures tapped only part of the Indian students' total self-concept, so that these conclusions must be taken as tentative until more research in the area of the self-concept is completed. The meaning which the "phenomenal self" has for a given individual appeared to depend upon the extent to which he perceived clear boundaries between himself and others and the values which his society stressed with regard to individual differences and interpersonal relations. Thus, while this study found that the "phenomenal self" did exist for most of the Indian students studied, the exact meaning which that self had depended to a great degree upon factors which our instruments did not completely measure.

## NATIONAL STUDY OF AMERICAN INDIAN EDUCATION

Instructions for Student Inventory C

We want to know how you feel about some people and things. Under each person or thing that we would like to know about, you will find seven sets of words. The words in each set mean the opposite of each other. Between each set of words there are six circles. The circles let you say how you think that set of words fits the person or thing at the top of the box. The circles mean

0	0	0	0	0	0
VERY	FAIRLY	SOMEWHAT	SOMEWHAT	FAIRLY	VERY
good	good	good	bad	bad	bad
worthless	worthless	worthless	valuable	valuable	valuable
weak	weak	weak	strong	strong	strong
happy	happy	happy	unhappy	unhappy	unhappy
lazy	lazy	lazy	active	active	active
smart	smart	smart	dumb	dumb	dumb
friendly	friendly	friendly	unfriendly	unfriendly	unfriendly

For example, suppose we wanted to know how you feel about a person, such as a cowboy. You might mark your sheet like this

COWBOY						
GOOD	0	●	0	0	0	0 BAD
WORTHLESS	0	0	0	●	0	0 VALUABLE
WEAK	0	0	0	0	●	0 STRONG
HAPPY	0	0	0	●	0	0 UNHAPPY
LAZY	0	0	0	0	0	● ACTIVE
SMART	0	0	●	0	0	0 DUMB
FRIENDLY	●	0	0	0	0	0 UNFRIENDLY

This would mean that you think a cowboy is fairly good, somewhat valuable, fairly strong, somewhat unhappy, very active, somewhat smart, and very friendly.

Mark only one circle for each set of words. Work as fast as you can, and don't go back and change a mark after you have made it.



GOOD       BAD  
 WORTHLESS       VALUABLE  
 WEAK       STRONG  
 HAPPY       UNHAPPY  
 LAZY       ACTIVE  
 SMART       DUMB  
 FRIENDLY       UNFRIENDLY

GOOD       BAD  
 WORTHLESS       VALUABLE  
 WEAK       STRONG  
 HAPPY       UNHAPPY  
 LAZY       ACTIVE  
 SMART       DUMB  
 FRIENDLY       UNFRIENDLY

## INDIANS

GOOD       BAD  
 WORTHLESS       VALUABLE  
 WEAK       STRONG  
 HAPPY       UNHAPPY  
 LAZY       ACTIVE  
 SMART       DUMB  
 FRIENDLY       UNFRIENDLY

## MY FUTURE

GOOD       BAD  
 WORTHLESS       VALUABLE  
 WEAK       STRONG  
 HAPPY       UNHAPPY  
 LAZY       ACTIVE  
 SMART       DUMB  
 FRIENDLY       UNFRIENDLY

## THIS SCHOOL

GOOD       BAD  
 WORTHLESS       VALUABLE  
 WEAK       STRONG  
 HAPPY       UNHAPPY  
 LAZY       ACTIVE  
 SMART       DUMB  
 FRIENDLY       UNFRIENDLY

## TEACHERS

GOOD       BAD  
 WORTHLESS       VALUABLE  
 WEAK       STRONG  
 HAPPY       UNHAPPY  
 LAZY       ACTIVE  
 SMART       DUMB  
 FRIENDLY       UNFRIENDLY

(TRIBE'S) WAY OF LIFE

GOOD       BAD  
 WORTHLESS       VALUABLE  
 WEAK       STRONG  
 HAPPY       UNHAPPY  
 LAZY       ACTIVE  
 SMART       DUMB  
 FRIENDLY       UNFRIENDLY

WHITE PEOPLE'S WAY OF LIFE

GOOD       BAD  
 WORTHLESS       VALUABLE  
 WEAK       STRONG  
 HAPPY       UNHAPPY  
 LAZY       ACTIVE  
 SMART       DUMB  
 FRIENDLY       UNFRIENDLY

DORMITORY

GOOD       BAD  
 WORTHLESS       VALUABLE  
 WEAK       STRONG  
 HAPPY       UNHAPPY  
 LAZY       ACTIVE  
 SMART       DUMB  
 FRIENDLY       UNFRIENDLY

GOOD       BAD  
 WORTHLESS       VALUABLE  
 WEAK       STRONG  
 HAPPY       UNHAPPY  
 LAZY       ACTIVE  
 SMART       DUMB  
 FRIENDLY       UNFRIENDLY

Check the statements that describe you best.

I am an American \_\_\_\_\_

I am an Indian \_\_\_\_\_

I am a White \_\_\_\_\_

I am a member of \_\_\_\_\_ tribe.

I am \_\_\_\_\_