AN ABSTRACT OF THE THESIS OF

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ESKIMO ADOLESCENTS IN FOUR DIFFERENT SECONDARY
SCHOOL ENVIRONMENTS

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Robert Denis Baron

Because native villages in Alaska are too small to justify the establishment of community high schools, rural native youth must either leave the state for high school instruction or attend schools far from their homes. The orientation, philosophy, and educational atmosphere differ widely from school to school, and little effort has been made to assess the effects of these varying educational experiences on village natives. This study was undertaken to investigate the self concept of Eskimo ninth-graders in four different secondary school environments in Alaska during the academic year 1971-72.

The subjects were 90 Eskimo ninth-graders who were away from home for the first time, with the following numbers of students at each school:

1. Anchorage--urban white boarding home family and school, 30
2. Beltz--white-oriented transitional town and boarding school, 35

3. Bethel--rapidly acculturating Eskimo transitional town, boarding home family, and school, 11

4. St. Mary's--modernized Eskimo village and biculturally-oriented boarding school, 14

Three testing instruments, developed specifically for this study, were used: (1) a form of the Semantic Differential, (2) a Competence Scale, and (3) a Teacher Rating form. The Semantic Differential and the Competence Scale were administered in September, 1971, and again in April, 1972; teachers evaluated students only in the spring.

The study concerned five major areas: (1) general characteristics of Eskimo self concept, (2) differences in self concept of the four groups, (3) changes in self concept during the year, (4) differences in male and female self concept, and (5) relationship among the testing instruments.

The data showed that the Eskimo subjects characterized themselves generally as friendly, helpful, and kind, but not particularly strong, good looking, or smart. They felt most confident in making new friendships and least able to speak in front of a group. Bethel students were significantly different from other school groups in positive self ratings on the spring Competence Scale. Teachers showed no significant differences in total evaluation scores assigned to the subjects. Changes in self concept over the year were not significant for any group, nor were there significant differences between
males and females in self perceptions. Although total scores did not vary significantly, specific item scores were significantly different at the four schools for student self-ratings, teacher evaluations, and sex differences.

Correlations significant at the .01 level occurred between the fall and spring Semantic Differential tests, the fall and spring Competence Scales, and between the spring Semantic Differential and both of the Competence Scales. Teacher evaluations correlated significantly at the .05 level with the spring Competence Scale.

The present research is part of a longitudinal, five-year study of these same groups which concerns not only self concept but mental health, achievement, and educational and occupational goals.
An Investigation of the Self Concept of Alaskan Eskimo Adolescents in Four Different Secondary School Environments

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AN INVESTIGATION OF THE SELF CONCEPT OF ALASKAN ESKIMO ADOLESCENTS IN FOUR DIFFERENT SECONDARY SCHOOL ENVIRONMENTS

I. THE PROBLEM

Introduction

About one-sixth of Alaska's 300,000 people are Alaska natives--Eskimos, Indians, Aleuts--most of whom live in widely scattered villages across the half-million square miles of Alaska. While some villages are growing at a dramatic rate, the large number of communities with total population below 200 (115 according to the 1970 census) illustrates the rural nature of Alaska's schools (Lin, 1971).

Although there are difficulties in many remote areas at the elementary level involving lack of facilities, teacher recruitment, accessibility for supervision and such, still, basic elementary programs do exist; problems in Alaskan education accumulate and converge at the secondary level.

Few communities have a sufficient number of adolescents eligible for secondary school education to justify the establishment of a village high school. In approximately 160 villages where schools are operated by the state of Alaska, the Bureau of Indian Affairs, or the local boroughs, only ten schools offer work beyond the eighth grade, four of these providing only ninth-grade courses and three only
ninth- and tenth-grade courses. In three of the twelve predominantly native city or borough school districts, no local secondary programs are available. With an absence of local facilities, then, in the majority of cases students must either leave the state for high school instruction or must attend schools within the state which are far from their homes.

Most Eskimo children are reared in semi-traditional to traditional ways that are radically different from those of western culture. They often see much of what they are taught in school as irrelevant or even in conflict with what they have learned at home. Such children grow up believing that cooperation and generosity are necessary for survival and thus are ill-equipped to cope in an atmosphere where separation, individuality and competition are rewarded (Chance, 1966).

On reaching secondary-school age they are transported from an environment where they have had little adult supervision, have experienced adult privileges, and have been free to make adult decisions, into an atmosphere of adult-imposed routines and regulations, and rigid schedules. The orientation, philosophy, and educational atmosphere differ widely from school to school; and little, if any, empirical information exists on the psychological effects the varying educational experiences have on the students who are exposed to them.
While it goes without saying that personality dynamics involve many other forces peripheral to the realm of education, the experiences an individual has in school—especially in a school far from home with a different cultural orientation—constitute a potentially significant influence in the overall adjustment of the student.

Dr. Judith Kleinfeld, a staff member of both the Center for Northern Educational Research and the Institute of Social, Economic and Government Research at the University of Alaska, has begun a longitudinal study of what happens to groups of Eskimo adolescents from remote villages who are attending secondary school in four widely divergent environments in Alaska. Her research involves an analysis of student change in several major areas. These areas include educational and occupational goals, achievement, and mental health. The investigation will cover the students' entire secondary school experience and continue for at least one year following. The present study is a part of Dr. Kleinfeld's research.

**Purpose of the Study**

The purpose of this study was to investigate the self concept of Eskimo ninth-graders in four different secondary school environments in Alaska during one academic year. The research was undertaken to find out what happens to the self concept of the rural adolescent Alaskan native when he is taken from the village and placed in a vastly
different social and educational environment. The fact that his own cultural background is often in conflict with the western way of life suggests that the young Eskimo might have more than normal difficulty in establishing or maintaining a positive self image.

The quantification of self concept was determined by the use of three measuring instruments: a form of the semantic differential, a questionnaire relating to behavioral competencies, and a teacher evaluation form, all three instruments developed specifically for this study.

This investigation was undertaken with the idea that a person's view of himself is closely related to effective functioning and that a study of self concept may provide valuable information for Alaskan educators in their attempts to develop relevant educational programs for native youth. The research has attempted to provide answers, through the use of the measuring instruments described above, to the following questions:

1. What are the characteristics of the self concept of Eskimo adolescents?

2. Are there differences in the self concept of Eskimo students attending each of the four schools included in the study?

3. Are there changes in the self concept of Eskimo students in boarding schools and boarding homes over the period of a year?
4. Are there differences in self concept between male and female Eskimo adolescents?

5. Is there a relationship among the instruments used to measure the self concept of the students?

Need for the Study

"We don't want to be studied," said an Alaskan native leader in recent hearings on Indian education, "we just want Manhattan back!" (Bowkett, 1970, p. 3). This may be a facetious statement, but it expresses clearly the negative feelings Alaskan natives have about studies of their needs. One can find any number of reports relating to Eskimo eating habits, religious practices, hunting patterns, family life, courtship, housing, economy, social control, and language, to name a few. In fact, a standing Alaskan joke is that a "typical Alaskan village family consists of the mother, the father, one grandparent, six children, and one anthropologist" (Marsh, 1967, p. 67).

Older studies on educational needs of Alaskan natives deal mainly with the historical development of education in the state. Treating the data in varying degrees of depth, writers have covered the field in detail starting with the establishment of Russian mission schools in the late 1700's, and continuing on through territorial schools, other parochial schools, schools sponsored by the old Bureau of Education, the state school system, establishment of
borough schools, and the present-day dual system of education (Dafoe, 1959; Duffy, 1963; Koponen, 1964; Marsh, 1967; Ray, 1959). Even though the literature is prolific, however, much of it is simply narrative and based on observation alone; few studies have dealt with empirical data.

The state of Alaska has attempted to solve its present secondary school dilemma by providing regional boarding high schools and boarding homes, increasing these services each year. Accompanying the steady expansion of these facilities, however, is the need for a continual and scientific evaluation of their psychological and educational effects on the young people for whom they have been established.

What happens to the adolescent Alaskan native when he is uprooted from the familiar and thrust into a vastly different cultural and sociological situation? Is he able to survive the stress of change by maintaining a realistic conception of his abilities, keeping a positive image of himself as a person, holding to ideals he deems to be of value? Will he keep a more positive self concept if he remains in a small all-native high school in a traditional Eskimo village or if he is integrated early into white urban society? What happens to the self concept of an Eskimo youth as he experiences living in a modern home with people of another culture? What conditions contribute to the formation of a satisfying identity during the critical adolescent years? Is the regional secondary school the answer?
Increasingly, educational researchers are calling for change in native education and are exhibiting concern over the effects that present educational policies and organization are having on the young people themselves (Ak. Dept. of Ed., 1971; Bowkett, 1970; Cline, 1972; Coleman et al., 1966; Connelly and Barnhardt, 1970; Feldman, 1970; Forbes, 1972; Hippler, 1970; Leonard, 1971; Schroeder, 1970; Youdan, 1970).

Native spokesmen appearing before the Subcommittee (of the Governor's Commission on Cross-Cultural Education) who addressed themselves to the goal of the educational programs for Alaska natives emphasized two ends to be served--providing young people with a sense of self-identity and equipping them to assimilate if they chose to do so (Ray et al., 1970, p. 34).

Brown (1968) suggests that the first goal in the goals and philosophy of a boarding school should be to "give children confidence and pride in what they are..." and that "students' own values--sensitvity, honesty, and friendliness--should not be destroyed" (p. 93). Stating the same idea in a different way, Griffin and Bowman (1969) recommend that "efforts should be made to allow the students to retain...the underlying attitudes which make the Eskimos unique and strong..." (p. 6).

Decisive changes in the Alaskan economy resulting from the settlement of the native land-claims, together with increasing participation by natives in politics, education, business, and government,
have created an urgent demand for educated native leaders who can assume responsibility in these areas.

Very few natives go to college, fewer graduate, and the dropout rate even before high school is startling (Ray et al., 1962). In his study of Alaskan native secondary school dropouts Ray found that the dropout rate tends to rise at the end of the ninth grade, suggesting that this period in the native Eskimo adolescent's life may be most critical educationally.

A high school education would seem to be a minimum goal for Alaskan youth if they are to assume significant adult roles. Together with the attempts to expand the availability of secondary education for rural adolescents, objective efforts should be made to assess the effects of these experiences on the students themselves. The present study has addressed itself to this task.

The Secondary School Environments

At the present time there are five boarding high schools in Alaska operated by the Bureau of Indian Affairs, the State Department of Education, and the Catholic Church, including a new school and dormitory in Bethel which opened in the fall of 1972. Plans are underway for the building of a dormitory in Fairbanks to house students from outlying villages who will attend the large local high school. Several other areas also provide boarding homes for students while they are
attending school. In 1970-71 the Boarding Home Program completed its fifth year of operation. The total enrollment of 1,150 students in 26 communities throughout the state was an increase of 60 percent over the previous year (Ak. Dept. of Ed., 1971).

In the spring of the year every eighth grade student in Alaska for whom local educational facilities are unavailable completes an application form for the kind of school he would like to attend the following fall. He may state his preferences for a small or large high school, a school close to home, a boarding home with white or native family, a dormitory. Every effort is made to respond positively to his choices. A small survey in Bethel conducted in 1971-72 by the Boarding Home Coordinator revealed that between 80 and 90 percent of the students in Bethel were where they had chosen to be.

The following four schooling alternatives were chosen for the study since each represents an educational and social milieu unique from the other three:

1. Boarding Home Program, Anchorage, Alaska
2. Beltz Regional High School, Nome, Alaska
3. Boarding Home Program, Bethel, Alaska
4. St. Mary's High School, St. Mary's, Alaska

Anchorage

In a borough which contains a population of almost 132,000,
Anchorage has just over 48,000 people and is the largest city in Alaska.\(^1\) Anchorage has six schools which offer ninth grade instruction, with enrollments ranging from 1,029 (grades seven to nine) to 2,796 (grades seven to eleven) in 1971-72. Students in the Boarding Home Program live with white families and attend predominantly white schools. Professional staff members are available at any time to counsel students, appear in court, confer with boarding parents, attend evening meetings, travel to villages, or work with other coordinators.

During 1971-72 the Boarding Home Program in Anchorage instituted a student-orientation program, implemented special counseling programs for boarding students, and created a project called "The Rural Transition Center." Its objective was "to provide special instruction to students coming in from bush schools not having acquired the basic skills to succeed in a regular classroom" (ibid., p. 35). That the dropout rate was reduced from 19 percent in 1970-71 to 12 percent in 1971-72 may be an indication that these special efforts are meeting with some success.

**Beltz at Nome**

The William E. Beltz Regional High School represents a

\(^1\) All population figures are from the 1970 U.S. Census.
white-oriented transitional town and boarding school. It is located three miles from Nome, a town of about 2,500 people, and surrounded by the remains of an Army base, deserted gold mines, and endless stretches of tundra. The Beltz dormitory housed an average of 171 rural students during 1971-72. Beltz students were from 27 villages located along the West Arctic Coast, Noatak and Kobuk Valleys, Seward Peninsula and adjacent areas, and St. Lawrence Island.

In a recent report on the Beltz school by the Alaska State Commission for Human Rights, the following statements may be found (Griffin and Bowman, 1969):

> It is apparent that no decisions as to the underlying philosophy and purpose of the school have ever been made... with the exception of the policy on drinking offenses at the school...

Beltz was originally conceived as a vocational school. It now combines academic and vocational curricula, and neither is satisfactory...

The dormitory operation flounders between a horror of too much regimentation and the realization that some controls have to be exercised over a group of teenagers living together... (p. 4)

...both faculty and administration at Beltz told the Commission that they do not consider the school a success, either vocationally or academically... (p. 5)

Students who come to Beltz school are ninth-graders in name only... estimates of the actual grade level of entering students ran as low as second grade, with most students falling in the 5th-7th grade range (p. 9).

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2"Transitional" refers to towns of 1,000 to 3,000 people, where the majority consists of acculturating Eskimos who have migrated from small villages to obtain employment or have access to school and medical facilities (Hippler, 1970).
The report continues with specific recommendations for improvement. Lack of physical education facilities was a severe limitation in the Beltz school, a situation which has been remedied with the recent completion of a gymnasium.

Bethel

The city of Bethel is located on a curve of the Kuskokwim River, approximately 80 miles inland from the Bering Sea and 419 air miles west of Anchorage. Situated in the central part of an area which encompasses 100,000 square miles, Bethel is the main cultural, educational, economic and administrative capital for southwestern Alaska and has a population of about 2,400. The highest concentration of native peoples in Alaska is found in the approximately 66 villages in this vast area, about 90 percent of the 15,000 population being Eskimos or Athabascan Indians.

In Bethel today much of the Eskimo culture is preserved and practiced, but this is by the older generation. Fishing, hunting, and trapping continue to be important to the Eskimos of all ages. Bethel, however, is an example of a rapidly acculturating transitional town where Eskimos are absorbing more and more of the white culture because of their close association with that culture in many phases of living. It is a bilingual community with English and Eskimo spoken.
The population is youthful: the median age is 17 years, and the area has a high birth rate (Connelly and Barnhardt, 1970).

Most of the students who come to Bethel for schooling are not unfamiliar with the town since it is the supply and transportation center for the area and has the only hospital for hundreds of miles.

Living with boarding parents of their own culture, boarding home students attend a predominantly native high school but are taught by Caucasian teachers. Instruction is provided in academic areas and electronics. The high school lacks an adequate library and has not been accredited by the Northwest Association of Secondary Schools and Colleges.

In a community background report on Bethel for a national survey of Indian education, the following statement was made:

Bethel parents represent the first generation to have attended high school at all.... (They have) a positive attitude about the school and strong approval for establishing a regional high school in the area (ibid., p. 11).

The fall of 1972 saw the opening of a regional high school and a dormitory capable of housing 600 students.

St. Mary's

A hundred miles from the mouth of the Yukon River, nestled against a backdrop of rolling hills and black spruce, close to where a clear mountain stream flows into the muddy Yukon, lies the village of
St. Mary's. The original Catholic Mission Boarding School of St. Mary's was built in the late 1800's at the mouth of the Yukon on flat delta land; the new facilities on the new site were completed in 1950. Gradually the natives built homes and moved their families nearby until today what were originally only a mission school and dormitory have become the heart of a modernized Eskimo village with about 385 inhabitants.

The high school has grown from an enrollment of three students in 1952-53 to 218 students in grades seven to twelve in 1972 and possesses at present a white volunteer teaching staff of 15. The school plan is dictated not only by School Board standards but by the 400-year-old system of Ursuline education. As one historian stated:

The plan is one of great flexibility. The basic ends of education are the same; the approach changes every few years. In fact, the rising cultural graph of native education can be measured by the methods our nuns have used during the past fifty years of the school's existence. It is an interesting history of pedagogy in Alaska (Duffy, 1963, p. 78).

The first high school students to be graduated from a Catholic high school in Alaska were four Eskimos at St. Mary's in 1956. In 1971, 33 Eskimos received diplomas there. Until a disastrous fire in 1963 destroyed the machine shop, radio room, gymnasium and library, the curriculum offerings included vocational training. However, instruction at the present time is limited to academic subjects, and standards are high.
The boarding school is biculturally-oriented, and the teaching Sisters and Brothers are anxious that the students retain knowledge of their own language as well as learn English thoroughly. A Superior refers to the language as follows:

It is not the intention of our teaching staff to obliterate completely a beautiful language which is a real cultural asset to an Eskimo. Rather, our wish is that he become bilingual. We want him to hold on to his native tongue and for this reason we keep up our Eskimo prayers and songs. But we also realize that English is our medium of education and it must be learned well (ibid., p. 80).

There have been other attempts over the years to provide education beyond elementary school for rural students. One example was the "pilot high school experiment" established in 1955, whereby students studied correspondence courses under the supervision of a regular teacher. When this failed to satisfy the need for direct instruction, several small local high schools in the largest villages were organized with enrollments of from a dozen to a hundred pupils. The schools were so small and so limited in their course offerings, however, that serious questions arose as to their effectiveness (Ray, 1959).

From many aspects the regional high school and the boarding home program appear to be the most satisfactory solutions to Alaska's problem of expanding the availability of secondary education for village youth. It seems important now that an objective assessment be
undertaken to determine from the attitudes of the students themselves whether this is indeed so.

**Limitations of the Study**

The primary limiting factors of any study of school environments in Alaska are those of expense and distance. Travel to some areas is possible only by air, and schools are hundreds of miles apart. While generalizations may be drawn regarding all Eskimo ninth-graders, conclusions in this research are based on the samples studied.

The samples are limited to ninth-grade adolescents in four settings who were away from home for the first time. The inclusion of students who had spent some time previously in a boarding home or boarding school was thought to have produced unique variables which would make the results of the research less meaningful.

Because the study deals with attitudinal changes for those students who remained in the same environment for the entire school year, it was further limited to include only those pupils for whom complete data from both administrations of the testing instruments were available. For a number of reasons not every student who participated in the fall testing was able to complete the follow-up testing in the spring. Recording of the data disclosed that several students
had left school—whether to continue their education elsewhere or simply to drop out was unknown.

As has been pointed out, the state of Alaska has a number of boarding home programs. The present study focuses on only two of these—Anchorage and Bethel. Although there is considerable contrast between these two areas, they are alike in that each represents an educational and social environment very different from the traditional life experiences of village young people. Boarding homes in smaller, primarily traditional native areas were not seen as contributing significantly to the aims of the present investigation. The research was also limited to the two boarding high schools in the state whose student bodies are primarily Eskimo—Beltz and St. Mary's.

The criteria for a student's inclusion in the sample studied were that he be Eskimo, in the ninth grade at one of the four secondary schools, and away from his home village in a boarding situation for the first time. No attempt was made to screen for academic ability or achievement, parental encouragement, size of village, socioeconomic status, or other potentially important variables in the development of attitudes toward self.

Although the term "self concept" has been defined for use in this study, the fact that a number of researchers have ascribed various meanings to the term may be perceived to be a limitation in that self concept remains a somewhat nebulous psychological construct.
Findings drawn from this study are based upon three instruments used to measure the self concept of the students. The inherent difficulty encountered in any attempt to quantify a psychological construct requires that results be interpreted in light of the limitations of the instruments themselves. A possible limitation may be found in the assumption that because the semantic differential was effective in a number of studies with minority groups, including Eskimos, it would also be useful with a population which was totally Eskimo.

Definition of Terms

**Native.** Anthropologists classify native peoples of Alaska into three main groups: Eskimos, Indians, and Aleuts; and the term "native" describes any person claiming one-fourth or more native heritage.

**Eskimo.** Best known and most numerous of the native Alaskans are the Eskimos, who live mainly in the northern and western part of the state. Most villages are located along the Bering Sea and Arctic Ocean coasts; the lower river deltas of the Yukon, Kuskokwim, and smaller rivers in western Alaska; and the Diomede, King, St. Lawrence, and Nunivak Islands.

**Self concept.** Carl Rogers, who has been called a phenomenal theorist because of his stress on the role of the conscious or phenomenal self concept in determining a person's behavior, states that
"the self concept is learned through a gradual process of interaction with the environment" (1951, p. 499). Other leading self-concept theorists like Donald Snygg, Arthur Combs, and Abraham Maslow, while they may not concur fully with Rogers' ideas, agree that the self concept develops as a consequence of learning experiences with other human beings and the introjection of their values and attitudes.

The following definition by Carl Rogers expresses the point of view taken in this research toward the construct of self concept:

The self concept is an organized configuration of perceptions of the self which are admissible to awareness. It is composed of such elements as the 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 the goals and ideals which are perceived as having positive or negative valence. It is, then, the organized picture, existing in awareness... of the self and the self-in-relationship..." (ibid., 1951, p. 501).

For the purpose of this study, then, self concept is considered to be the conscious evaluation which an individual makes with regard to himself, and to himself in relation to others. It expresses an attitude of approval or disapproval and indicates the extent to which the individual believes himself to be capable, significant, successful and worthy.

Other terms describing attitude toward self. Various studies have referred to the self in a number of ways, using descriptors like self-concept, self-view, self-esteem, self-image, self-perception, and self-identity. In the present study these terms have been used
interchangeably, and may be construed to be synonymous in describing the self concept as a conscious awareness by the individual of who he is and how he stands in relation to his environment.

**Summary**

The state of Alaska is facing unique educational problems because of its vast area, its diverse population, and the large number of villages which are too small to justify the establishment of a local high school. The most satisfactory solution to the secondary school dilemma seems to have been found in the establishment of regional boarding high schools and boarding home programs in several larger communities. As a result, however, secondary school-aged youth are transported to schools far from home where the sociological and cultural environment is often shockingly different from that in their native villages.

Little, if any, empirical information exists on whether the educational experiences ordered and organized by the dominant American culture are relevant for culturally-different rural adolescents. Perhaps even more important, few attempts have been made to discover whether the young Eskimo is able successfully to survive the stress of change by maintaining a realistic conception of his abilities and keeping a positive image of himself as a person.
A part of Dr. Judith Kleinfeld's longitudinal study which involves analysis of student change in several major areas, this research has focused on changes in perception of self. It concerns an investigation of the changes in self concept of Eskimo ninth-graders in four different secondary school environments in Alaska during the academic year 1971-72.

The four secondary school environments selected for this study differ fundamentally along a modernized western--traditional Eskimo continuum and may be described as follows:

1. Anchorage Boarding Home Program--urban white boarding home family and school,

2. Beltz Regional High School in Nome--white-oriented transitional town and boarding school,

3. Bethel Boarding Home Program--rapidly acculturating Eskimo transitional town, boarding home family, and school,

4. St. Mary's High School in St. Mary's--modernized Eskimo village and biculturally-oriented boarding school.

These environments represent major educational alternatives which exploratory study suggests have substantially different effects on the attitudes of the students--among these, attitude toward self. With the view that an individual's perception of himself is a significant variable in the educational process, this study may be considered a first step toward the goal of providing educational programs which enhance and maintain a positive image of self for the adolescent Alaskan Eskimo.
II. SURVEY OF RELATED LITERATURE

In this chapter an attempt has been made to summarize the essential characteristics of the semantic differential as an aid to understanding the reason for its inclusion as one of the measuring instruments in the present investigation. Because this study was concerned with the measurement of self concept of Alaskan Eskimos partially by means of the semantic differential, particular attention has been given to reporting the findings of research which support the use of that technique in measuring the self concept of subjects of other cultural and linguistic backgrounds.

Investigation of the literature regarding the relationship of self concept to majority-minority dynamics and to social class, as well as to school achievement, seemed pertinent to this study inasmuch as the research dealt with minority groups in school settings. Therefore, a review of studies in these areas has been included.

Finally, although there is extremely limited research in the field, studies have been cited which deal exclusively with Eskimo self concept.

Since 1949 an increasingly large output of investigations pertinent to a wide variety of personality theories has accorded an important or even central role to the self concept. In The Self Concept Wylie (1967) explores and analyses the literature which has attempted to relate self
concept to an extensive list of variables, including sex, role, friendship, parent-child interaction, body characteristics, learning, acceptance of others, academic achievement, authoritarianism, popularity and level of aspiration. In addition, she organizes and describes the numerous hypotheses, research designs, and measuring instruments which have been used to measure self concept.

From the Q sorts, rating scales, questionnaires and adjective check lists commonly employed to quantify the self concept, the semantic differential was chosen as one of the measuring instruments for the present study primarily because it minimizes the use of language and therefore is especially useful with subjects who do not read English well.

The research pertinent to this study may be grouped generally into five categories of investigation:

(a) essential characteristics of the semantic differential as a measuring instrument for this study,

(b) effectiveness of the semantic differential when used with subjects of other cultural and linguistic backgrounds,

(c) relation of self concept to majority-minority dynamics and to social class,

(d) relation of self concept to school achievement for minority youth, and

(e) self concept of Eskimos.
Essential Characteristics of the Semantic Differential

In this study one of the instruments used to measure self concept was a form of the semantic differential. Although it is not the purpose here to make an extensive evaluation of the semantic differential as a measuring instrument since that information is investigated elsewhere (Osgood, Suci, and Tannenbaum, 1957; Snider and Osgood, 1969), a brief discussion of its essential characteristics will aid in interpreting and understanding the research.

While the instrument is often referred to as "the" semantic differential, as if it were some kind of "test" having a definite set of items and a specific score, it is actually a generalized technique of measurement, and the concepts and scales used must be adapted to the requirements of the specific research problem to which it is applied. The most commonly used form is made up of seven-step scales bounded on either end by polar adjectives. These define a semantic space, and any number of scales may be used to describe some concept which is then given meaning by its location in this space.

The semantic differential was developed through factor analyses of subjects' ratings of common-word stimuli on a wide range of semantic scales. The researchers used adjectives because they are the most general and natural qualifiers in English.
Early studies conducted by Osgood and others (Osgood et al., 1957) with a variety of white populations—old, young, male, female, students taking a new course in international relations, students in a traditional course, Republicans, Democrats, schizophrenics, normals—gave evidence that semantic scales fall into highly correlated clusters. For example, fair-unfair, high-low, kind-cruel, are all found to correlate .90 or better. Such a cluster seems to represent the operation of a single, general factor in social judgments; the researchers term this the evaluative factor. Scales like strong-weak, heavy-light, form another cluster and are called the potency factor. Yet a third cluster correlates highly—scales like fast-slow, active-passive, which are called the activity factor.

These three factors are taken as independent dimensions of the semantic space within which the meanings of concepts may be specified. In no group studied were significant differences found in the underlying dominant factors. This does not say that meanings of particular concepts were the same for all—"time" has a different meaning for old or young people, "Truman" means something different to Republicans or Democrats. What it does mean is that the semantic framework within which these affective judgments are made is constant.

Since the subjects in the present study were requested to complete all of the twelve scales available in their rating of "Myself," the
findings of Oetting (1967) should be mentioned. His study revealed that when subjects are allowed to leave blanks on a semantic differential, they will, where they view the bi-polar adjective pairs as meaningless in relation to the concept involved. Oetting goes on to say, however, that he "found the forced-choice technique apparently valid for the semantic differential in that forced-choice responses tend to have the same pattern as neutral responses!" (p. 701). In other words, subjects required to rate an adjective pair which may be without meaning for them will generally choose a neutral position on the scale in their evaluation.

**Semantic Differential and Other Cultures**

Several studies support the general usefulness of the semantic differential as a measure of self concept (Kubiniec, 1971; Richmond and White, 1971; Silverman, 1963). Although the primary research using the semantic differential involved only white subjects, later studies have attested to the generality of affective meaning, both intra-culturally and cross-culturally. Tanaka, Oyama and Osgood (1963) investigating three groups of subjects differing in both culture and language--Japanese, Korean, and American--added evidence to the findings of Osgood (Osgood, Suci and Tannenbaum, 1957) concerning the salient factors identifiable as Evaluative, Potency and Activity.
In his study of mostly bilingual Zuni, Hopi and Navajo Indians and Spanish speakers from the New Mexico area, Suci (1960) found a high degree of similarity in their semantic structures with the exception of the Navajos, whose similarity measures were consistently lower. All of the subjects were fluent speakers of their native language but had varying degrees of fluency in English.

Kumata and Schramm (1956) made the discovery that native speakers of Japanese and Korean, working with Japanese and Korean translations of 28 scales and 30 concepts, made judgments which had the same factor structure as judgments made by American subjects with the scales and concepts in English. In other words, there was a remarkable correspondence across cultures even when judgments were made in native languages. Later Kumata (1957) showed the same kind of equivalence for Japanese and American monolinguals, as did Triandis and Osgood (1958) with Greek and American monolinguals, thus extending the generality of the Kumata and Schramm findings.

Evans (1971) used the semantic differential in research with secondary school students which revealed systematic response tendencies across different types of subjects and different classes of concepts.

Using the semantic differential as one of two self-report instruments, Dreyer (1970a) in his study of over 2,000 American Indians concluded:
it was possible to define the construct of the "phenomenal self" operationally with English language instruments that were originally designed for white samples to obtain results with American Indian students... that the instruments did measure self-concept among American Indian students (p. 22).

He did find, however, that the concurrent validity of the two instruments varied from one Indian group to another so that it appeared that the self was not measured to the same degree for all groups.

These studies, and others made by Miron (1961), Osgood (1962), Oyama, Tanaka, and Chiba (1962, as cited by Tanaka et al., 1963), Sagara, Yamamoto, and Nishimura (1961, as cited by Tanaka et al., 1963), offer empirical evidence that human beings utilize a similar semantic frame of reference irrespective of their linguistic and cultural backgrounds.

Relation of Self Concept to Majority-Minority Dynamics and Social Class

One of the most frequent assertions of self concept theorists is that the level of self esteem is based upon the individual's perception of himself in relation to others, that it is determined by the social context within which he exists. Coleman (Coleman et al., 1966), for example, postulated that when Negro pupils became part of an integrated school system, their self concept diminished.

Bryde (1965) claims that:
the Indian adolescent...is caught in a cultural conflict between his native Indian culture and the dominant white culture; he has few adult role models, suffers from what Erickson calls "identity diffusion," and exhibits clinical symptoms of alienation and depression (p. 5).

Carter (1968), however, in using the semantic differential with Mexican-American and "Anglo" high school ninth-graders in the same school, reached a different conclusion. He found little or no difference in self-view between the two groups, that the profiles of the two groups were almost identical and did not support the notion that the Mexican-Americans perceived themselves more negatively than did their "Anglo" peers--this, in spite of their being well aware of the way teachers and others viewed their group. It was: "very obvious that teachers and administrators believed them to be inferior and to conclude that they saw themselves this way" (p. 218).

The Bureau of Indian Affairs (1971) conducted a survey of students at three Indian schools and one inner-city school in Arizona relative to various aspects of the educational program and to "myself." It was found that students in the three Indian schools had positive attitudes, and that the inner-city school students (an integrated situation) had more positive attitudes than did students in all-Indian schools, with Mexican-Americans and Blacks in the latter school expressing a higher self image than the Indians.

Havighurst (1970; Dreyer and Havighurst, 1970) and Dreyer (1970a, 1970b) are responsible for important contributions to the
literature on American Indian youth in their extensive studies of over 2,000 subjects from many sections of the United States. Their use of a form of the semantic differential as one of the measuring instruments and their careful evaluation of it have added valuable information to its efficacy in assessing the attitudes of subjects of a different culture.

Havighurst (1970) compared the self evaluation of Indian students with that of non-Indian students of the same age and of comparable social status in the several different societies. The results indicate that Indians have about the same level of self evaluation as non-Indians. One of the eight groups of Indians in the experiment (Northwest Indians) included an Eskimo community. Havighurst found that the Northwest Indian group consistently tended to produce a strong sex difference, with boys rating themselves significantly higher in self-esteem than girls at all age levels. The non-Indian control group showed no such sex difference. In the same study Indian boys were compared with distinctly maladjusted groups of Anglo-American boys, and the Indians rated themselves more favorably.

Using the same groups of Indians as subjects Dreyer (1970b) found that the subjects seemed to identify with White or Indian cultures about equally. The only exception was the urban Indian group which had a higher correlation between "self-esteem" and "Indian" for every
age group, and a significantly more negative view of the White culture than the Indian culture.

It might be expected that Urban Indians would be at least moderately acceptant of their predominantly White cultural surroundings; however, quite the reverse appeared to be true. Given their minority group status amid the larger White urban environment, the urban Indian students appeared to become stronger in their cultural identification as Indians (p. 10, 11).

For most of the Indian students it appeared that cultural distinctions were blurred, but that the Urban Indians had a clearer sense of cultural boundaries and cultural differences with an accompanying view of themselves as more clearly belonging to one culture and not the other.

In the study of another variable Dreyer found that all Indian groups rated "My future" more positively than their present self. Although the researchers could not tell the nature of that future, this basically positive attitude was consistent across all age groups for both sexes.

One conclusion which emerged from Dreyer's research which is especially relevant to this study concerns the relationship which was found between the student's level of "self-esteem" and his minority or majority group status in his school.

This showed that rural and small city Indians who were in the majority in their schools had significantly higher "self-esteem" scores than urban Indians and rural and small city Indians who were in the minority among students at their schools, while boarding school students
who were in the majority at their schools had lower "self-esteem" scores than any of the other groups (p. 15).

Zinkel and Green (1971) would dispute this, however, since their research with Puerto-Rican and Negro children indicated that self concept is related to ethnic group membership but not to mixture (majority-minority dynamics).

Coopersmith (1967) obtained a weak, nonsignificant relationship between social class and self esteem, as did Rosenberg (1965), who also found no relationship of ethnic affiliation to self esteem. Neither of these studies indicates a clear and definite pattern of relationships between social class and positive or negative attitudes toward self.

On the other hand Silverman (1963) in a study of the self-images of upper-middle class and working class adolescents found that the latter saw themselves as more inhibited than the former. The upper-middle class students viewed themselves as more independent and expressive.

Soares and Soares (1969) arrived at still a different conclusion, stating that disadvantaged children in their study evidenced more positive self perceptions than those in an advantaged group. They explained this by saying that the disadvantaged students were functioning according to expectations by teachers and parents (low); thus, they were satisfied with themselves and as a consequence had a more positive self concept and reflected self.
Self Concept and School Achievement

Perhaps the most widely published finding with regard to self concept and its measurement is that it is positively related to school achievement.

According to Coleman (Coleman et al., 1966),

...whatever measure is chosen, the attitudinal variables have the strongest relation to achievement. It is, of course, reasonable that self-concept should be so closely related to achievement, since it represents the individual's estimate of his own ability... (p. 320).

One finds some support for this idea in the investigation of Adams (1967) wherein he found a lower evaluation of self, using the semantic differential, for the lower achiever in two groups of seventh-grade students, Anglo-American and Mexican-American. Williams and Cole (1968) also found significantly positive correlations between self concept measures and several variables, including the child's perception of school, his emotional adjustment and academic achievement.

Greenberg (1970), however, again using the semantic differential, found no significant differences in the ratings of "Myself" between poor achievers and good achievers in a group of fourth-grade urban lower-class Negro children.

In a similar population of fifth-graders, the poor achievers assigned themselves more favorable ratings than good achievers on
potency scales. Greenberg offered a possible explanation for this when she discovered that good achievers made greater use of the neutral position on the scales, and poor achievers were more likely to use polar points. This fact, coupled with the observation that respondents tended in general to rate themselves more positively than negatively, might be responsible for the higher scores of poor achievers.

Coleman (Coleman et al., 1966) does qualify his earlier statement when he states later in his report:

... of the three attitudinal variables, however, it (self concept) is the weakest, especially among minority groups, where it shows inconsistent relations to achievement at grades 9 and 12 (p. 320).

Dreyer (1970b) found that for Indian students "self esteem" was not related to school achievement, at least not to the extent that it appeared to be for white populations in most studies. The value placed on the "self" by Indian students seemed to be quite separate from performance in school.

Both Zinkel and Green (1971) and Dreyer and Havighurst (1970) recommend that conclusions about self concept obtained from using one instrument alone are lacking in completeness. Zinkel and Green suggest that both a self-report instrument and a teacher-rating form should be employed. Dreyer and Havighurst from two self-report instruments, one the semantic differential, developed a "combined
self" scale which they found helpful in maximizing the understanding of self concept and its relationship to other variables.

**Eskimo Self Concept**

Studies of the self concept of Eskimo children appear to be extremely limited. The Indian studies of Dreyer and Havighurst mentioned earlier included one Eskimo and four Indian communities in the Northwest Indians category. The total number of students in that group represented only 12 percent of the total number of subjects in the research, however, and results for the Eskimo community were not separated from conclusions made about the group as a whole.

A study of the effects of attitude and intelligence variables upon the English language achievement of Alaskan Eskimo children by Forbes (1972) suggests that there is a significant relationship between attitude toward self and performance on measures of mental ability and achievement in the meaningful use of English.

Salisbury (1967) found decreases in two dimensions of the semantic differential with regard to "yourself" in his analysis of Eskimo students in a college orientation program over a period of three summers of attendance.

**Summary**

In the extensive studies of self concept various researchers have
obtained similar, ambiguous or conflicting results using a variety of measuring instruments. Differences in the conclusions drawn from the studies are due in part to the methods of assessing the data, but also to the vagueness of the term itself and the difficulties inherent in measuring an abstract psychological construct. The research cited in this chapter will attest to the fact that self concept is not only difficult to measure but that very few clear and definite patterns of relationships between the self concept and other variables can be found.

The semantic differential, one of the instruments used in this study, has been shown to be useful in measuring self concept for persons of other cultural and linguistic backgrounds--including Indians and Eskimos, Alaska's two native groups.

For white students generally, self concept and school achievement appear to be positively related, the lower achiever tending to evaluate himself more negatively than the good achiever. For minority youth, however, the relationship appears to be inconsistent. Conflicting, too, are the conclusions concerning the relationship between self concept and ethnic group membership or social class.

Studies of the self concept of Eskimo adolescents appear very rarely in the literature. The Indian studies of Dreyer and Havighurst (1970) included a small group of Eskimos, but results for the Eskimos were not separated from the total group. This study was undertaken
as an attempt to increase what is at the present time very limited knowledge in the area of adolescent Eskimo self concept.
III. METHOD AND TREATMENT OF THE DATA

Chapter III describes the subjects of this study, the three testing instruments used to furnish data for analysis, and the testing procedure, as well as the statistical procedures employed to answer the five major questions of the study presented in Chapter I.

The Sample

The subjects of this study were all of the Eskimo adolescents attending the ninth grade at four selected secondary schools in Alaska, with certain exceptions. Students who had previously lived in a boarding school or boarding home were excluded from the sample, which was limited to young Eskimos away from home in a boarding situation for the first time. One student was not included because, through an oversight, his teacher failed to complete an evaluation form. Three students inadvertently skipped a page of questions relating to the data used in this research and had to be eliminated. Several of those students who were present at the first administration of the testing instruments in the fall left school and were absent for the follow-up testing in the spring. Although the reasons for this behavior would be interesting to study, they are not part of the present investigation.
Because of the factors listed above, from a total of 132 Eskimo ninth-graders at the four schools, 90 met the criteria for inclusion in the sample. They were divided as follows:

- 30 from Anchorage Boarding Home Program
- 35 from Beltz Regional High School
- 11 from Bethel Boarding Home Program
- 14 from St. Mary's High School

The total sample of 90 was balanced so far as the students' sex was concerned—44 boys and 46 girls—although numbers were unequal in individual schools. Table 1 shows the distribution of boys and girls at each school.

Table 1. Distribution of Sample by Sex and School.

<table>
<thead>
<tr>
<th>School</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchorage</td>
<td>17</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td>Beltz</td>
<td>14</td>
<td>21</td>
<td>35</td>
</tr>
<tr>
<td>Bethel</td>
<td>7</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>St. Mary's</td>
<td>6</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>44</strong></td>
<td><strong>46</strong></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

The ages of the students also varied, and Table 2 shows the distribution of the students by age at each school.

Ages of the Eskimos ranged from 13 to 18 with a mean age of 14.6 years for the group as a whole. Table 2 indicates a considerable
difference in average age of students at each school, a full twelve-month spread between Eskimos at St. Mary's and Anchorage, the average ages of other groups falling somewhere in between. As a total group, the average age of the boys was essentially similar to that of the girls, 14.7 to 14.5.

Table 2. Distribution of Sample by Age and School.

<table>
<thead>
<tr>
<th>Age</th>
<th>Anchorage</th>
<th>Beltz</th>
<th>Bethel</th>
<th>St. Mary's</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>4</td>
<td>9</td>
<td>1</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td>14</td>
<td>13</td>
<td>17</td>
<td>3</td>
<td>3</td>
<td>36</td>
</tr>
<tr>
<td>15</td>
<td>9</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>16</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>10</td>
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<td>5</td>
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<td>18</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td>30</td>
<td>35</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Mean Age</td>
<td>14.5</td>
<td>14.2</td>
<td>15.3</td>
<td>15.5</td>
</tr>
</tbody>
</table>

Testing Instruments

Two self-report forms and a teacher evaluation form were used in an attempt to obtain a quantitative measure of the self concept of the Eskimo subjects.

Semantic Differential

Using Osgood's semantic differential technique (Osgood, Suci and Tannenbaum, 1957), each student was asked to rate "Myself" on
twelve scales defined with bipolar adjectives, i.e., good-bad, clean-dirty, smart-dumb, which stressed Osgood's evaluative factor. The scales selected were identical, with one exception, to those used by Forbes (1972) in her study of the effects of attitude and intelligence variables upon the English language achievement of Alaskan Eskimo children. The adjective pair "smart-dumb" in the present study was substituted for "brave-not brave" in the Forbes study since it was the aim of the current research to include in the student's evaluation of himself his personal assessment of his intellectual capabilities.

Selection of the pairs of adjectives was made on the recommendation of a cultural anthropologist, an Eskimo language instructor (both from the University of Alaska), and the trained Eskimo test administrators in the Forbes study. Each of the scales allowed for seven ratings; thus, a respondent could score from 1 to 7 on a given scale with the most favorable end of the scale always scored 1 and the least favorable scored 7. A copy of the Semantic Differential used in this study may be found in the Appendices.

**Competence Scale**

Additional information about students' attitudes toward themselves was obtained from an experimental questionnaire, a portion of which included twelve statements relating to behaviors that generally seem to cause difficulty for Eskimo adolescents. Dr.
Kleinfeld, author of the research of which the present study is a part, selected the specific behaviors based on observations resulting from two years of working closely with Eskimo students, and consultations with teachers and boarding home parents. For the purposes of the present study, these twelve behavioral statements, or competencies, were extracted from the questionnaire and labeled "Competence Scale." 

The twelve competency statements were inserted in the body of the questionnaire between questions about career choices, and agree-disagree statements concerning attitudes toward life in general. They were not identified as "Competence Scale" to the students. Each competency statement, i.e., "I can talk to strangers," was followed by four possible answers ranging from "all of the time" (scored 1) to "none of the time" (scored 4), from which the student chose the phrase most appropriate for him. In each case the smallest number corresponded with the most positive answer.

The total questionnaire was pretested on forty Eskimo students in the Fairbanks Boarding Home Program, a population similar to that in the sample. As a result of the pretest, some items were rejected as being not specific enough or confusing in some respect to the testees. Several were reworded to improve clarity in phrasing and vocabulary. The revised form of the questionnaire contains only statements that were clearly understood by all of the respondents.
A copy of the twelve competency statements, termed the "Competence Scale," may be found in the Appendices.

The practice of using two different kinds of self-report instruments is supported in the literature (Zinkel and Green, 1971; Dreyer and Havighurst, 1970; Dreyer, 1970a, 1970b). Greenberg (1970) suggests that requiring the disadvantaged child to rate himself on a semantic differential as "good" or "bad" or "goodlooking" or "ugly," with appropriate intermediate positions, might be perceived as threatening and cause him to react with inflated positive feelings. On the questionnaire form, however, the student need not categorize himself as a certain kind of person but merely report, for instance, that he can talk in front of a group "most of the time" or "none of the time." The latter instrument is "more behaviorally and operationally defined and may make the admission of negative feelings more tolerable" (ibid., p. 629).

Dreyer and Havighurst (1970) developed a "combined self" scale from the semantic differential and another self-report instrument, which they found useful in interpreting the data from their studies of American Indian groups.

Teacher Rating Form

At the conclusion of the school year, the teacher of each student was asked to evaluate the student's "Mood" on a 5-point scale including
"don't know," ability and interest in classwork on a 4-point scale, and general adjustment on a 4-point scale.

This section of the survey presented some difficulties since the lowest score was not the most favorable in all cases. For example, "...this student seems lethargic or withdrawn" had the same response pattern, ranging from "frequently" (scored 1) to "never" (scored 4) or "don't know" (scored 0), as "...this student participates in class discussions." Also, any "don't know" responses by the teacher tended to distort the meaning of the total evaluation. To counteract these distortions, the following measures were employed:

1. For questions numbered 1, 2, 3, 4, 5, 6, 7 and 9, the scoring was reversed, i.e., 1 became 4, 2 became 3, 3 became 2, and 4 became 1. In this way the smallest assigned value remained the most positive in every case.

2. Sixteen forms had one "don't know" response; two had two "don't know" responses. In each case the total number of items from which descriptive statistics were drawn was adjusted accordingly.

A copy of the Teacher Rating form may be found in the Appendices.

Testing Procedure

The Semantic Differential and the questionnaire, including items later to be known as the Competence Scale, were administered to
students in each of the four schools in September, 1971. Test administrators explained the procedure carefully, were present during the completion of the forms, and answered the few questions which arose. In April, 1972, students completed the same instruments through an identical procedure.

Teacher ratings for each student were obtained at that time through personal interviews, the same individual in every case being responsible for completing the Teacher Rating form during the interview. The reasoning was that the use of the same person at every interview would minimize the introduction of variables caused by the personality of the interviewer.

When the data had been collected, test results were recorded from individual student files and keypunched on IBM cards.

Treatment of the Data

This study attempted to answer the following questions, posed in Chapter One:

1. What are the characteristics of the self concept of Eskimo adolescents?

2. Are there differences in the self concept of Eskimo students attending each of the four schools included in the study?

3. Are there changes in the self concept of Eskimo students in boarding schools and boarding homes over the period of a year?
4. Are there differences in self concept between male and female Eskimo adolescents?

5. Is there a relationship among the instruments used to measure the self concept of the students?

In order to provide the most useful measure of the test results and the most meaningful information about the students under study, scores on the twelve scales of each of the self-report forms for each student were multiplied by constants, summed, weighted by specific coefficients, and correlated by means of canonical correlation analysis. This statistical technique determines the constants and coefficients which will produce the greatest correlation between the tests (Kendall, 1957). A new combined score was obtained for each student which was then used in interpreting the data. Henceforth that score will be referred to as the "combined" score, as contrasted with the raw score.

Question 1. What are the characteristics of the self concept of Eskimo adolescents? Using the raw scores, means and standard deviations were obtained for the students in each of the four schools for the Semantic Differential and the Competence Scale from both fall and spring testings. These statistics were also computed for the total sample as a group. From these data it was possible to determine which scales or items received the most positive or negative
evaluations by the Eskimo students and a general idea of how Eskimo adolescents as a group view themselves.

**Question 2.** Are there differences in the self concept of Eskimo students attending each of the four schools included in the study? Means of raw score sums from the four self-report instruments (Semantic Differential, fall and spring; Competence Scale, fall and spring) were compared through analysis of variance to determine whether there were differences among groups at each of the four schools. Summed scores from the Teacher Rating forms were compared in the same manner.

Individual items on each of the four self-report forms and Teacher Rating forms were also compared using analysis of variance. The purpose was to determine if any single response differed significantly among the schools. When the F-ratio revealed a difference significant at the .05 level or better, tests for Least Significant Difference were performed to identify the school(s) which differed.

**Question 3.** Are there changes in the self concept of Eskimo students in boarding schools and boarding homes over the period of a year? Changes in self concept for the students from fall to spring were computed within schools and between schools in the following ways:

(a) analysis of the variance between the schools of the changes in Eskimo self concept from the two administrations of the tests in
the fall and spring, using the combined scores. When the F-ratio revealed a difference significant at the .05 level or better, tests for Least Significant Difference were performed to identify the school(s) which differed.

(b) paired t-test within each school using the combined scores from the two administrations of the tests.

**Question 4.** Are there differences in self concept between male and female Eskimo adolescents? Using t-tests, means of raw scores for boys and girls for each item of the Semantic Differential and the Competence Scale from the fall testings were compared, as well as the means for the total combined scores for boys and girls.

**Question 5.** Is there a relationship among the instruments used to measure the self concept of the students? In order to answer this question the sum of the raw scores on each of the five tests for the total sample (Semantic Differential, fall and spring; Competence Scale, fall and spring; Teacher Rating form) was correlated with the sum of the raw scores on each of the other four.

Analysis of the data will be found in Chapter Four.
IV. PRESENTATION OF THE FINDINGS

In this chapter data relevant to the questions posed in Chapter I are tabulated and analysed. These data are related to an investigation of the self concept of Eskimo ninth-graders in four different secondary school environments in Alaska as measured by (a) the Semantic Differential, (b) a Competence Scale, and (c) a Teacher Rating form, all three instruments having been developed especially for the present study.

Question 1. What are the characteristics of Eskimo adolescent self concept?

The first area studied concerned the general characteristics of the self concept of the four groups of adolescent Eskimos as indicated by their statements about themselves on the two self-report instruments which they completed in two testing sessions seven months apart. To examine this question means and standard deviations of raw scores, item by item, were obtained for groups in each of the four school environments, as well as for the entire sample studied. Raw scores rather than combined scores, which represent a statistical correlation of the two testing instruments and which are explained in Question 3 of this chapter, were used because the purpose was to examine each of the self-report forms separately.
The results of this breakdown for the Semantic Differential for the four groups studied are presented in Table 3. All scores are rounded off to two decimal places.

In order to facilitate understanding of the data analysis, the twelve scales of the Semantic Differential used in this study are listed below. A copy of the actual testing instrument may be found in Appendix A.

1. good-bad
2. clean-dirty
3. strong-weak
4. good looking-ugly
5. not liar-liar
6. wise-foolish
7. kind-cruel
8. helpful-not helpful
9. smart-dumb
10. likes to work-lazy
11. friendly-unfriendly
12. generous-selfish

With the lowest scores being the most positive, these data indicate that in the fall students in the Boarding Home Program in Anchorage rated themselves least favorably on items 3, 4, and 9, and most favorably on items 7 and 8. Spring testing scores showed that their conception of themselves as strong or weak, item 3, revealed the greatest positive gain.

Scores for students at Beltz resemble Anchorage student scores in the unfavorable ratings assigned to scales 3, 4, and 9, and more positive ratings on scales 7 and 8, as well as 10 and 11. It may be noted, however, that whereas for Anchorage students only three item ratings decreased in value between the two administrations of the test, Beltz students moved in a negative direction over the months on nine of the twelve items.
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The Bethel group rated itself least positively on items 3, 4, and 9, and most positively on items 2, 7 and 10. At St. Mary's the scales receiving most negative responses were 4 and 9, with 10 and 11 being scored most positively. Students at that school rated themselves the same or higher in spring testing on eleven of the twelve items.

Table 4 describes the same data for the Competence Scale.

To facilitate understanding of the data analysis, the twelve statements on the Competence Scale are listed below. A copy of the actual testing instrument may be found in Appendix B.

1. I can get good grades in school
2. I can do my schoolwork right
3. I can make new friends
4. I can talk to strangers
5. I can tell people things I want to tell them
6. I can talk in front of a group
7. I can change the way I act when I want to
8. I can find out things I need to know
9. I can find out how to travel where I want to go
10. I can find out how to do schoolwork that I don't know how to do
11. I can solve my problems
12. I can decide things without too much trouble

The data in Table 4 indicate that students in every school chose responses closely resembling each other, as evidenced by the smaller values in standard deviations, only one standard deviation at St. Mary's for either testing reaching the 1.00 level. All of the mean scores in the fall for students at Bethel are grouped at a 2+ level, scores on eleven of the twelve statements for students at Anchorage and Beltz show the same cluster, and nine scores are in that range for students at St. Mary's.
Table 4. Mean Scores on Competence Scale by School, Fall and Spring Testing.

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Generally speaking, in the fall most of the students rated themselves somewhere between "most of the time" and "some of the time" in response to the statements concerning ability to perform stated competencies.

Spring testings show scores at the 3+ level on one item at Anchorage (statement 6), two at Beltz (statements 4 and 6), none at Bethel (in actuality scores on statements for students at Bethel moved to the 1+ level), and two at St. Mary's (statements 6 and 7). The ability to talk in front of a group (statement 6) achieved relatively high negative evaluations at all four schools.

Eskimo students also rated themselves negatively on their ability to tell people things they want to tell them and to change the way they act when they want to (statements 5 and 7) at all four schools.

In Table 5 means and standard deviations for scores on both self-report instruments are reported for the total group.

For the group as a whole, scale 4 on the Semantic Differential received the most negative ratings both fall and spring. Scores on scales 3, 6, 9, and 12 also were at the 3+ level for both testings. Students rated themselves highest on scales 2, 8 and 11 in both administrations of the tests.

The Competence Scale scores show less variation than do those on the Semantic Differential, the most negative responses occurring for statement 6, and the most positive responses for statement 3.
Table 5. Mean Scores on Semantic Differential and Competence Scale for Total Sample, Fall and Spring Testing.

<table>
<thead>
<tr>
<th>Item</th>
<th>Semantic Differential</th>
<th></th>
<th></th>
<th>Competence Scale</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall</td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Spring</td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>1</td>
<td>2.88</td>
<td>1.21</td>
<td>3.08</td>
<td>1.21</td>
<td>2.66</td>
<td>.60</td>
</tr>
<tr>
<td>2</td>
<td>2.66</td>
<td>1.20</td>
<td>2.46</td>
<td>1.10</td>
<td>2.56</td>
<td>.56</td>
</tr>
<tr>
<td>3</td>
<td>4.14</td>
<td>1.37</td>
<td>3.56</td>
<td>1.21</td>
<td>2.17</td>
<td>.64</td>
</tr>
<tr>
<td>4</td>
<td>4.26</td>
<td>1.63</td>
<td>4.33</td>
<td>1.34</td>
<td>2.81</td>
<td>.62</td>
</tr>
<tr>
<td>5</td>
<td>2.87</td>
<td>1.49</td>
<td>2.82</td>
<td>1.39</td>
<td>2.72</td>
<td>.60</td>
</tr>
<tr>
<td>6</td>
<td>3.49</td>
<td>1.32</td>
<td>3.39</td>
<td>1.17</td>
<td>3.16</td>
<td>.65</td>
</tr>
<tr>
<td>7</td>
<td>2.57</td>
<td>1.25</td>
<td>2.84</td>
<td>1.05</td>
<td>2.93</td>
<td>.68</td>
</tr>
<tr>
<td>8</td>
<td>2.63</td>
<td>1.25</td>
<td>2.59</td>
<td>1.03</td>
<td>2.47</td>
<td>.67</td>
</tr>
<tr>
<td>9</td>
<td>3.89</td>
<td>1.34</td>
<td>3.73</td>
<td>1.18</td>
<td>2.68</td>
<td>.70</td>
</tr>
<tr>
<td>10</td>
<td>2.71</td>
<td>1.38</td>
<td>2.79</td>
<td>1.38</td>
<td>2.53</td>
<td>.64</td>
</tr>
<tr>
<td>11</td>
<td>2.46</td>
<td>1.22</td>
<td>2.57</td>
<td>1.09</td>
<td>2.77</td>
<td>.52</td>
</tr>
<tr>
<td>12</td>
<td>3.17</td>
<td>1.33</td>
<td>3.00</td>
<td>1.19</td>
<td>2.64</td>
<td>.62</td>
</tr>
</tbody>
</table>
All but one of the means of raw scores on each item of the Competence Scale for the total group are at the 2+ level for both fall and spring testings.

**Question 2.** Are there differences in self concept among groups of Eskimo adolescents at each school by self-reported scores or by teacher ratings?

To consider this question an analysis of the variance of the raw score sums from each of the two self-report instruments administered in the fall and spring was performed. The results are shown in Table 6.

### Table 6. Analysis of Variance of Means of Student Raw Score Sums by School, Fall and Spring Testing.

<table>
<thead>
<tr>
<th></th>
<th>Anch.</th>
<th>Beltz</th>
<th>Beth.</th>
<th>St. M.</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Sem. Diff.</td>
<td>40.30</td>
<td>35.37</td>
<td>35.00</td>
<td>40.21</td>
<td>2.29</td>
</tr>
<tr>
<td>Spring Sem. Diff.</td>
<td>38.47</td>
<td>37.34</td>
<td>33.00</td>
<td>37.29</td>
<td>.94</td>
</tr>
<tr>
<td>Fall Comp. Scale</td>
<td>31.77</td>
<td>32.06</td>
<td>30.00</td>
<td>34.50</td>
<td>2.36</td>
</tr>
<tr>
<td>Spring Comp. Scale</td>
<td>31.13</td>
<td>31.77</td>
<td>27.00</td>
<td>32.64</td>
<td>3.74*</td>
</tr>
</tbody>
</table>

*Significant at .05

The mean scores for students at the four schools reported in Table 6 indicate that the only significant difference among the groups of Eskimo adolescents occurred in their responses to the Competence Scale in the spring testing. Students at Bethel saw themselves as significantly more able to perform certain competencies at the end of the school year than did their peers at the other three schools.
For this study teachers at each school at the end of the year participated in an evaluation of each student using the Teacher Rating form, a copy of which may be found in Appendix C. In order to ascertain whether teacher evaluations differed significantly from school to school, an analysis of the variance of sums of raw scores on the Teacher Rating forms was conducted. Table 7 shows the results of this analysis.

Table 7. Analysis of Variance of Means of Raw Score Sums of Teacher Evaluations by School.

<table>
<thead>
<tr>
<th>School</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchorage</td>
<td>25.93</td>
</tr>
<tr>
<td>Beltz</td>
<td>26.43</td>
</tr>
<tr>
<td>Bethel</td>
<td>24.64</td>
</tr>
<tr>
<td>St. Mary's</td>
<td>22.93</td>
</tr>
<tr>
<td>F-Ratio</td>
<td>1.49</td>
</tr>
</tbody>
</table>

The results displayed in Table 7 indicate that there was no significant difference among the schools in total score evaluation assigned to students by teachers.

Further examination of the data was carried out by means of an analysis of the variance of raw score means on each item of the four student tests (fall and spring administrations of the two self-report forms) and of the Teacher Rating form. The purpose was to determine whether there might be specific item ratings which differed significantly among schools.

Because the raw score means for each item at each school were listed in Tables 3 and 4, only the F-ratio for score variance on each
item is given here. When the F-ratio was significant, tests for Least Significant Difference were performed to determine which schools differed from each other. Table 8 contains that information.

In the fall testing Beltz Eskimos perceived themselves more positively on items 7 and 10 than those at Anchorage, while students at St. Mary's were more negative than both Beltz and Bethel in their reports about themselves on item 7. These differences held true only for the fall testing, however, and showed no significant difference on the second test administration in the spring. Bethel students were significantly different from students at Anchorage and Beltz in their positive perceptions of themselves on item 11 in the spring.

The specific statements referred to are listed below:

7. kind-cruel
10. likes to work-lazy
11. friendly-unfriendly

On the Competence Scale native students at Bethel were more positive than students at the other three schools in their self evaluations of four competencies: on statement 1 in the fall and statements 6, 11, and 12 in the spring. Bethel students saw themselves more favorably than students at two other schools on items 2 and 6 in the fall, and from one other school on items 4 and 7 in the spring.

The pupils at St. Mary's evaluated themselves significantly lower than all three other schools on item 7 in the spring, although there
### Table 8. F-Ratios from Analysis of Variance of Each Item on Four Student Self-Report Forms, Fall and Spring Testings

<table>
<thead>
<tr>
<th>Item</th>
<th>Fall</th>
<th>Differing Schools</th>
<th>Spring</th>
<th>Differing Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.20</td>
<td></td>
<td>1.62</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2.31</td>
<td></td>
<td>1.36</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1.00</td>
<td></td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1.41</td>
<td></td>
<td>1.12</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1.17</td>
<td></td>
<td>.14</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>2.28</td>
<td></td>
<td>1.03</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>4.22**</td>
<td>Beltz++, Anch., St. M.</td>
<td>.84</td>
<td>Bethel+, St. M.</td>
</tr>
<tr>
<td>8</td>
<td>1.90</td>
<td></td>
<td>1.30</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>.42</td>
<td></td>
<td>.63</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>2.87*</td>
<td>Beltz+, Anch.</td>
<td>2.42</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>2.41</td>
<td>2.78*</td>
<td>Bethel++, Anch., Beltz</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>.77</td>
<td>.99</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SEMANTIC DIFFERENTIAL**

<table>
<thead>
<tr>
<th>Item</th>
<th>Fall</th>
<th>Differing Schools</th>
<th>Spring</th>
<th>Differing Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5.12**</td>
<td>Bethel+++</td>
<td>1.41</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>4.45**</td>
<td>Bethel++, Beltz, St. M.</td>
<td>2.54</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.18</td>
<td></td>
<td>2.16</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1.78</td>
<td></td>
<td>3.78*</td>
<td>Anch. +, Beltz</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bethel+, Beltz</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>St. M. +, Beltz</td>
</tr>
<tr>
<td>5</td>
<td>.57</td>
<td></td>
<td>.73</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>3.48*</td>
<td>Beltz++, Anch., St. M.</td>
<td>3.68*</td>
<td>Bethel+++</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>St. M. +, Anch.</td>
</tr>
<tr>
<td>7</td>
<td>.52</td>
<td></td>
<td>4.25**</td>
<td>Beltz+, St. M.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bethel+, St. M.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Anch. +, St. M.</td>
</tr>
<tr>
<td>8</td>
<td>.81</td>
<td></td>
<td>.20</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>1.19</td>
<td></td>
<td>.93</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>2.17</td>
<td></td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>.28</td>
<td></td>
<td>3.53*</td>
<td>Bethel+++</td>
</tr>
<tr>
<td>12</td>
<td>1.23</td>
<td></td>
<td>6.20**</td>
<td>Bethel+++</td>
</tr>
</tbody>
</table>

---

* Significant at .05
** Significant at .01
+ Significant in positive direction from one school (identification of differing school follows)
++ Significant in positive direction from two schools (identification of differing schools follows)
+++ Significant in positive direction from three schools (no identification necessary)
was no difference in the fall testing on that item. In the fall their ratings were significantly different in a negative direction from two schools on item 6 and from one school on item 2, although on the latter the St. Mary's rating was more positive than that at Anchorage.

Beltz students were more positive on item 6 in the fall than Anchorage or St. Mary's and more negative than Bethel on item 2. The spring testing showed Beltz students rating themselves lower than the three other schools on item 4 but more positively than St. Mary's on item 7.

Anchorage students were significantly positive on no items but were more negative on item 2 than St. Mary's in the fall, and more negative than both Beltz and Bethel on item 6 in the fall and from St. Mary's on that item in the spring.

The specific statements referred to are listed below:

1. I can get good grades in school
2. I can do my schoolwork right
4. I can talk to strangers
6. I can talk in front of a group
7. I can change the way I act when I want to
11. I can solve my problems
12. I can decide things without too much trouble

While an analysis of the variance of raw score sums on Teacher Rating forms revealed no significant differences between school groups, further analysis of each of the thirteen items was undertaken to determine whether any one evaluative statement was rated
differently by teachers from school to school. The results of this analysis are given in Table 9.

Table 9. Analysis of Variance of Raw Score Means of Each Item on Teacher Rating Form by School.

<table>
<thead>
<tr>
<th>Item</th>
<th>Anch.</th>
<th>Beltz</th>
<th>Bethel</th>
<th>St. Mary's</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.33-</td>
<td>2.26-</td>
<td>2.00</td>
<td>1.43++</td>
<td>3.93*</td>
</tr>
<tr>
<td>2</td>
<td>2.83</td>
<td>2.49</td>
<td>2.64</td>
<td>2.14</td>
<td>1.59</td>
</tr>
<tr>
<td>3</td>
<td>2.40</td>
<td>2.00</td>
<td>1.73</td>
<td>2.00</td>
<td>1.58</td>
</tr>
<tr>
<td>4</td>
<td>1.73-</td>
<td>1.69-</td>
<td>1.09++</td>
<td>1.36</td>
<td>3.21*</td>
</tr>
<tr>
<td>5</td>
<td>2.03-</td>
<td>1.89</td>
<td>1.55</td>
<td>1.43+</td>
<td>2.76*</td>
</tr>
<tr>
<td>6</td>
<td>1.70</td>
<td>1.94-</td>
<td>1.82</td>
<td>1.14+</td>
<td>2.77*</td>
</tr>
<tr>
<td>7</td>
<td>.67++</td>
<td>1.20-</td>
<td>1.73--</td>
<td>1.00+</td>
<td>5.62**</td>
</tr>
<tr>
<td>8</td>
<td>1.80+++</td>
<td>2.40+-</td>
<td>3.18--</td>
<td>2.57-</td>
<td>4.87**</td>
</tr>
<tr>
<td>9</td>
<td>2.20</td>
<td>1.74</td>
<td>2.00</td>
<td>1.71</td>
<td>2.02</td>
</tr>
<tr>
<td>10</td>
<td>1.60+</td>
<td>2.20---</td>
<td>1.09++</td>
<td>1.71+-</td>
<td>7.33**</td>
</tr>
<tr>
<td>11</td>
<td>2.23-</td>
<td>2.09-</td>
<td>1.45+++</td>
<td>2.29-</td>
<td>4.76**</td>
</tr>
<tr>
<td>12</td>
<td>2.23</td>
<td>2.23</td>
<td>2.09</td>
<td>2.14</td>
<td>.12</td>
</tr>
<tr>
<td>13</td>
<td>2.17</td>
<td>2.31</td>
<td>2.27</td>
<td>2.00</td>
<td>.53</td>
</tr>
</tbody>
</table>

* Significant at .05
** Significant at .01
+ Significantly different positively from one, two, or three other ++ schools
+++ Significantly different negatively from one, two, or three other schools

These data indicate that teachers at one of the four schools differed significantly from teachers at one or more of the other three schools on eight of the thirteen items. The most significant differences appeared on item 8 (participates in classroom discussions) where Anchorage teachers rated their students more positively than teachers at the other three schools, on item 10 (Does this student
work hard in class?) where Beltz teachers assigned more negative ratings than those at the other three schools, and on item 11 (I can solve my problems), where Bethel teachers rated their students more positively than others.

Positive differences from two schools appeared on item 7 at Anchorage, items 4 and 10 at Bethel, and item 1 at St. Mary's; negative differences from two schools were indicated on items 7 and 8 at Bethel. Otherwise, significant item differences marked in the table occurred only between two of the four schools in the study. The reader is referred to the Teacher Rating form in Appendix C for explanations of the foregoing items.

**Question 3.** Are there changes in the self concept of groups of Eskimo adolescents from fall to spring within schools or among schools?

The data for the previous question concern differences among schools as indicated by raw scores on the testing instruments made by both students and teachers. The purpose of Question 3 was to ascertain the amount of change which occurred in the self concept of these students over the school year as reported by themselves on the instruments provided.

In previous studies the recommendation was made that a more complete analysis of self concept might be achieved by using more than one instrument (Zinkel and Green, 1971; Dreyer and Havighurst, 1970) and that a combination of scales might be helpful in maximizing understanding of self concept. To this end the score for each student
on each item was multiplied by a constant and the products were summed. These sums were weighted by specific coefficients and correlated through the use of canonical correlation analysis. A new combined score was thus determined for each student which was used in interpreting the data. The coefficients which were used in order to achieve the maximum correlation of .69 may be found in Appendix D.

An analysis of the variance of change in Eskimo self concept over the school year among schools was computed using the new combined scores. The results are shown in Table 10.

<table>
<thead>
<tr>
<th>Anchorage</th>
<th>Beltz</th>
<th>Bethel</th>
<th>St. Mary's</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.32</td>
<td>-0.17</td>
<td>-0.22</td>
<td>-0.20</td>
<td>0.06</td>
</tr>
</tbody>
</table>

An examination of the data in Table 10 reveals that there was no significant difference among the schools in the amount of change in self concept of student groups over the school year.

To ascertain whether there were changes in reported self concept of ninth-graders within each school from fall to spring testing, paired t-tests were performed for the four groups using the combined scores. Table 11 illustrates the results of these tests.
Table 11. Comparison of Changes Within Schools in Self Concept of Eskimo Adolescents over Academic Year.

<table>
<thead>
<tr>
<th></th>
<th>Anchorage</th>
<th>Beltz</th>
<th>Bethel</th>
<th>St. Mary's</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean, Fall</td>
<td>-0.47</td>
<td>-0.48</td>
<td>-0.58</td>
<td>-0.43</td>
</tr>
<tr>
<td>Mean, Spring</td>
<td>-0.15</td>
<td>-0.31</td>
<td>-0.36</td>
<td>-0.23</td>
</tr>
<tr>
<td>Mean Difference</td>
<td>-0.32</td>
<td>-0.17</td>
<td>-0.22</td>
<td>-0.20</td>
</tr>
<tr>
<td>Standard Error of Difference</td>
<td>.26</td>
<td>.24</td>
<td>.32</td>
<td>.43</td>
</tr>
<tr>
<td>t-value</td>
<td>-1.23</td>
<td>-0.72</td>
<td>-0.70</td>
<td>-0.46</td>
</tr>
<tr>
<td>d.f.</td>
<td>29</td>
<td>34</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>t-table value at .05 level of significance</td>
<td>2.05</td>
<td>2.04</td>
<td>2.23</td>
<td>2.16</td>
</tr>
</tbody>
</table>

The answer to Question 3, as indicated by the results shown in Table 11, is that while there are changes in student self concept at each of the four schools over the academic year, these changes are not significant.

**Question 4.** Are there differences in self concept between male and female Eskimo adolescents?

The decision to consider this question in the present study arose from the findings obtained by Dreyer and Havighurst (1970) in their study of the self concept of over 2,000 American Indians, including one small group of Eskimos. They found that "for the adolescent age groups, there was a strong tendency for Indian boys to rate higher in 'self-esteem' than girls," and that "the only Indian group which
consistently produced this strong sex difference was Northwest Indians and Eskimos, where boys rated significantly higher than girls at all age levels" (p. 8).

Using t-tests, means of raw scores for boys and girls for each item of the self-report forms for the fall were compared. Fall scores were used to assess possible sex differences as the students came out of the villages and before they had experienced life in a different cultural environment. The results are shown in Table 12.

Table 12. Comparison of Raw Score Means of Male and Female Eskimo Adolescents for Each Item of the Semantic Differential and the Competence Scale.

<table>
<thead>
<tr>
<th>Item</th>
<th>Semantic Differential</th>
<th>Competence Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>1</td>
<td>2.76</td>
<td>2.98</td>
</tr>
<tr>
<td>2</td>
<td>2.93</td>
<td>2.42</td>
</tr>
<tr>
<td>3</td>
<td>3.62</td>
<td>4.60</td>
</tr>
<tr>
<td>4</td>
<td>3.67</td>
<td>4.77</td>
</tr>
<tr>
<td>5</td>
<td>2.95</td>
<td>2.79</td>
</tr>
<tr>
<td>6</td>
<td>3.60</td>
<td>3.40</td>
</tr>
<tr>
<td>7</td>
<td>2.48</td>
<td>2.65</td>
</tr>
<tr>
<td>8</td>
<td>2.64</td>
<td>2.63</td>
</tr>
<tr>
<td>9</td>
<td>3.69</td>
<td>4.06</td>
</tr>
<tr>
<td>10</td>
<td>2.60</td>
<td>2.81</td>
</tr>
<tr>
<td>11</td>
<td>2.43</td>
<td>2.48</td>
</tr>
<tr>
<td>12</td>
<td>3.26</td>
<td>3.10</td>
</tr>
</tbody>
</table>

* Significant at .05
** Significant at .01
These data support the Dreyer and Havighurst findings in regard to two items on the Semantic Differential and in no case on the Competence Scale. Girls scored significantly lower than boys on items 3 (strong-weak) and 4 (good looking-ugly), but scored significantly higher than boys on item 2 (clean-dirty). There was no significant difference in scores on the other items for either instrument.

Table 13 shows the comparison of total male combined scores with total female combined scores.

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>-0.50</td>
<td>-0.47</td>
<td>-0.16</td>
</tr>
</tbody>
</table>

Comparison of total combined scores for male and female Eskimo adolescents revealed no significant difference between them.

Question 5. Is there a relationship among the instruments used to measure the self concept of the students?

In order to answer this question, the sum of the raw scores on each of the five tests for the total sample was correlated with the sum of the raw scores on each of the other four. Table 14 shows the results of these correlations.
Table 14. Correlation of Four Student Tests and Teacher Rating Form.

<table>
<thead>
<tr>
<th>Tests</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sem. Diff. Fall with Comp. Scale Fall</td>
<td>.15</td>
</tr>
<tr>
<td>Sem. Diff. Fall with Sem. Diff. Spring</td>
<td>.38**</td>
</tr>
<tr>
<td>Sem. Diff. Fall with Comp. Scale Spring</td>
<td>.11</td>
</tr>
<tr>
<td>Sem. Diff. Fall with Tchr. Rating Form</td>
<td>-.10</td>
</tr>
<tr>
<td>Comp. Scale Fall with Sem. Diff. Spring</td>
<td>.29**</td>
</tr>
<tr>
<td>Comp. Scale Fall with Comp. Scale Spring</td>
<td>.49**</td>
</tr>
<tr>
<td>Comp. Scale Fall with Tchr. Rating Form</td>
<td>.14</td>
</tr>
<tr>
<td>Sem. Diff. Spring with Comp. Scale Spring</td>
<td>.39**</td>
</tr>
<tr>
<td>Sem. Diff. Spring with Tchr. Rating Form</td>
<td>.03</td>
</tr>
<tr>
<td>Comp. Scale Spring with Tchr. Rating Form</td>
<td>.22*</td>
</tr>
</tbody>
</table>

* Significant at .05
** Significant at .01

Using Garrett's table of significance of correlation coefficients (Garrett, 1970), Table 14 indicates that correlation significant at the .01 level occurred between each of the self-report forms, fall and spring, and between both forms of the Competence Scale and the Semantic Differential spring. The highest correlation appears between the fall and spring Competence Scales. The teacher evaluations correlated significantly at the .05 level with the Competence Scale spring.

Summary of Findings

In this study of the self concept of Eskimo ninth-graders in Alaskan boarding schools and boarding homes, an attempt was made to answer the following five questions:
1. What are the characteristics of the self concept of Eskimo adolescents?

2. Are there differences in the self concept of Eskimo students attending each of the four schools included in the study?

3. Are there changes in the self concept of Eskimo students in boarding schools and boarding homes over the period of a year?

4. Are there differences in self concept between male and female Eskimo adolescents?

5. Is there a relationship among the instruments used to measure the self concept of the students?

The data indicated that the Eskimo students in the sample evaluated themselves quite similarly on both the Semantic Differential and the Competence Scale, ratings on the latter instrument being generally more positive than those on the former.

Analysis of variance of the means of student scores by school showed no significant differences among the student groups in their self evaluations, except for the spring administration of the Competence Scale. According to ratings in that test Bethel students saw themselves more positively than did other groups. Teacher ratings at all four schools did not differ significantly.

Analysis of variance of each item on the four self-report forms revealed that groups differed significantly on three items on the Semantic Differential and eight items on the Competence Scale. The
Bethel students were significantly more favorable in their self evaluations than at least one other student group on ten of these eleven items, St. Mary's students more favorable on three and less favorable on four, Beltz students more favorable on four items and less favorable on three, and Anchorage students more favorable on two items and less favorable on six items.

While overall teacher ratings showed no significant differences among schools, specific items did. St. Mary's teachers rated their students in a significantly positive direction on five items, Bethel teachers on three, Anchorage teachers on two, and Beltz teachers on one. Significantly negative ratings were assigned by teachers at Beltz on seven items, Anchorage on four, St. Mary's on three, and Bethel on two.

Analysis of the changes in student self concept over the academic year indicated that while there were changes in student self concept within each school and among the four schools, these changes were not significant.

Boys differed significantly from girls on three items of the Semantic Differential but not at all on the Competence Scale. Girls perceived themselves more negatively than boys on two items and more positively on the third. A comparison of total scores for males and females revealed no significant differences.
The instruments which correlated most highly were the fall and spring Competence Scales, the fall and spring Semantic Differential scales, and both forms of the Competence Scale with the spring Semantic Differential, each pair showing correlations significant at the .01 level. The spring Competence Scale correlated significantly at the .05 level with the Teacher Rating form.

Interpretation of the results and possible conclusions which may be drawn from the data analysis follow in Chapter V.
V. ANALYSIS AND INTERPRETATION OF THE FINDINGS

To begin the discussion of the findings of this study, some statement should be made about the difference between self-report and self concept, inasmuch as conclusions are based largely on self-report instruments.

The psychological construct of self concept has proven to be very difficult to measure, and attempts to do so have provided investigators with varying, often conflicting, results. Combs has said,

Because it exists inside the person, the self-concept is not open to direct examination by any means currently known to us.... The self-concept is what a person perceives himself to be; it is what he believes about himself. The self-report, on the other hand, is what a person is willing or able to divulge.... The self-report is a behavior; the self-concept is a system of beliefs. Clearly, these matters are not the same (1972, p. 52, 53).

Combs would appear to place more value on "inferred" self concept, that is, self concept observed by another and inferred from observable behavior (ibid., p. 54). Despite criticism of self-report instruments, however, the self-report may be considered valuable data since it is an example of observable behavior.

Because of its symbolic character and the uses the behaver makes of it for self-expression, it has more than ordinary value for helping us understand another person" (ibid., p. 54).

A paramount concern of this research has been an examination of differences and changes in Eskimo self concept within schools and
between schools over the period of an academic year as measured by two self-report instruments. The assumption is made that student revelations of their self perceptions, even though they may not be totally accurate descriptions of their real feelings, will be stated from a similar frame of reference in the two testing situations. Therefore, the instruments provide a reasonable basis for interpreting difference or change. Data from the self-report instruments have been used in combination with teacher evaluations so that inferred self concept ratings may be examined as well.

**Question 1.** Computation of the means and standard deviations of the raw scores on each item of the two self-report forms was undertaken to gain some general idea of Eskimo adolescent perception of self.

Considered as a total group, Eskimos rated themselves most positively on the Semantic Differential in the scales of friendly-unfriendly, kind-cruel, and helpful-not helpful, in that order, scores which remained positive for both testings. These results are not surprising, for being friendly and helpful are modal characteristics of the Eskimo culture and represent basic values in their approach to life. In small villages Eskimos depend on each other for their very survival, as well as for the satisfaction of social needs; and children learn early the importance of sharing, cooperation, and generous hospitality (Chance, 1966; Kleinfeld, 1972a).
As a total group, students in the sample assigned the least favorable ratings to the scales of good looking-ugly, strong-weak, and smart-dumb, these ratings again holding true for both test administrations. The possibility exists that almost any group of fourteen- or fifteen-year olds might consider themselves more ugly than good looking simply because they are at an age when they are especially conscious of the opposite sex and have become aware of and are more concerned about the importance of physical attractiveness.

Experiences in village elementary schools with white teachers evidently have not contributed to feelings of academic prowess among Eskimo students as a group. The year in the ninth grade apparently provided no reason for the students to change this opinion of themselves as more dumb than smart, for scores remained among the lowest on this item in both testings.

The strong-weak scale, third of the three assigned most unfavorable ratings, could be an expression of feelings engendered by cultural influence. Eskimos are considered to be generally passive and to view themselves as essentially helpless in their attempts to deal with the harsh, external environment of the land they inhabit. Over generations they have learned to accept floods, tidal waves, earthquakes, intensely severe winters, and passively to relocate or rebuild when all has been destroyed. Thus, they may rightfully
consider themselves powerless when it comes to exerting control over their destinies and believe that they are more weak than strong.

When the native students are studied as separate school groups, similar response patterns emerge. The same three scales were assigned positive ratings at each school in the fall as for the total group. In addition, scale 10, likes to work-lazy, was classified close to the top at three of the schools. Cooperation in families and in villages requires the unified efforts of most of the members of the community, and the children work along with parents. The unfavorable ratings at each school in the fall are identical with total group ratings.

The students availed themselves most often of the third and fourth semantic spaces of the testing instrument, indicating that on the average they have neither highly favorable nor grossly unfavorable self perceptions for any of the adjective pairs. In general they placed themselves in spaces which were slightly more positive than the middle of the scales in most categories. Declining to utilize the most positive or negative poles of semantic description, they appear to see themselves as occupying a middle ground between two extremes.

If the self concept is learned from the experiences of interaction with the physical environment and with other human beings (Combs, 1972), then the life experiences of Eskimo children have seemingly not been such that they emerge into the adolescent world with intensely positive feelings about their inner selves. They appear
to perceive themselves as adequate rather than superior or inferior and assign themselves a rather passive, neutral position in their evaluations.

When the total sample is separated into a study of students by schools, a similar picture of neutral response is evident. However, an examination of the data from each of these groups provides some interesting material for observation. Over the year, between the two administrations of the tests, the groups exhibited considerable differences in the positive or negative direction of their self ratings.

A cursory examination of the differences cannot be taken at face value, however. Snider and Osgood have reported that:

For group data ('cultural meanings'), changes or differences in measured meaning as small as one-half of a scale unit are significant at the 5 percent level (1969, p. 79).

In other words, differences of less than .50 are not large enough to be considered significant. The data in this study reveal that in most cases, 13 out of 18, the negative changes were less than the required figure, and 20 out of 29 positive changes were too small to be attributed to anything but chance.

Therefore, while Beltz students exhibited the most changes in a negative direction in their feelings about themselves (nine out of twelve) only three of these were statistically significant. Strangely enough, however, these were the scales of kind-cruel, helpful-not
helpful, and likes to work-lazy--ones about which they were the most positive in the fall. Dormitory living conditions at Beltz are carefully controlled, and expulsion for rule infractions has been a common practice, modes of behavioral control which are alien to Eskimo culture.

Rural Eskimo children are accustomed to freedom of movement and of association, coming from small villages where everyone knows everyone else. Knowing that the child is with familiar people in a familiar area, village parents typically do not attempt close surveillance of his movements. In addition, a cardinal interpersonal premise of Eskimos is that one does not interfere directly with another person's behavior.

...Eskimos tend to hold very different attitudes toward the legitimacy of coercive authority and toward the ways in which it is appropriate to direct and sanction other people's behavior. Coercive authority is fundamental to western institutions with their extensive, formalized rule systems and explicit punishments for disobedience.... Among...Eskimos, in contrast, similar institutions tend to be absent....students, in short, are not accustomed to obeying formalized rules, except in the school setting (Kleinfeld, 1972a, p. 34).

Although the school situation is very positive and teachers at Beltz receive special training in working with native youngsters, the fact that students perceived themselves more negatively over the year suggests that ideal Eskimo cultural values suffer when living conditions are so different from previous experience. That these students
showed a significantly positive gain on the strong-weak scale may mean that they began to feel more able to deal with their environment, perhaps even in their attempts to adjust to or circumvent behavioral control.

Students at Bethel showed five negative changes, none of which was significant. Three of their seven positive changes were significant; and they perceived themselves as more friendly, liking to work more, and wiser in the second administration of the test. In Bethel students live in boarding homes with people of their own culture. Although a study in academic achievement for these same groups of students indicated that Bethel students made the poorest progress in school, perhaps living in an environment similar to that of their life experiences is the significant factor in providing the stability needed to strengthen Eskimo adolescent self concept. This finding would support the literature relative to the lack of relationship between school achievement and self concept for minority groups (Greenberg, 1970; Coleman et al., 1966; Dreyer, 1970b).

At Anchorage the three negative differences were not significant, but students there moved in a significantly positive direction on the strong-weak scale. In a predominantly white urban center like Anchorage, most Eskimo students are placed with white families because there are not enough urban native families to house them.
While homes must be licensed according to state regulations, local coordinators search beyond this requirement for boarding home parents who understand teenagers, have good relationships within their own families, and seem to have an appreciation of cultural differences (Kleinfeld, 1972a). Thus, the young Eskimos live in homes where they supposedly are accepted as part of the family. The Rural Transition Center where they attend school is staffed with excellent teachers who have undergone special training and are anxious to help the students in the acculturative process. That students were able to maintain their prior level of self concept rating in surroundings with the potential for producing the most cultural shock of any of the four school environments suggests that the boarding-home selection process is effectively providing environments which contribute to stability of self concept for the young natives.

Eskimos at St. Mary's moved positively on ten of the twelve scales, one remaining static, and four of these changes were significant. They exhibited positive gains in the scales of clean-dirty, not liar-liar, kind-cruel, and helpful-not helpful. Emphasis at St. Mary's is on perfect standards of conduct and concern for the group. Ethical human values are stressed—being cooperative, kind, nice to others, considerate, thoughtful, truthful, moral. Teachers seem to live with their students in an atmosphere of warmth and support. Much individual attention is given to each student, and much value is placed on
achieving academically as well as on being a good person. Personal warmth and insistence on high standards of academic performance have been found to be the two fundamental characteristics which distinguish effective from ineffective teachers of Eskimo students.

...Where the warm style (smiling, close body distance, mutually seated posture) was used, Indian and Eskimo students were found to perform significantly higher on the intellectual tests (Kleinfeld, 1972b, p. 24).

Personal warmth... is not sufficient in itself. The second factor that differentiated effective and ineffective teachers was the extent to which they actively demanded a high level of academic work... Eskimo students, while actually fearful in the threatening school situation, in many instances attempt to evade stressful learning tasks by playing the role of "shy Native." (They) stare mutely at the floor when confronted with an academic demand.... Eskimo students tend to have low academic self-concepts, which means that they themselves underestimate what they can actually do.(p. 25-26).

(The teachers) scorned those instructors who babied Native students and gave them only "loving kindness." They insisted upon a high level of academic work.... After a personal relationship developed between teacher and student, the student was able to interpret the teacher's academic demandingness as another expression of his personal concern (p. 26).

While the above study refers to the dimension of academic performance, it appears that the warm personal relationship between St. Mary's teachers and their students and their high demandingness in the classroom have contributed also to positive feelings about self in the young natives under their tutelage. The one significantly negative
difference pertained to the good looking-ugly scale--somehow the students found themselves wanting in this area.

Group scores on the Competence Scale resemble each other more closely than those on the Semantic Differential, all of the mean scores being at the 2+ level (between "most of the time" and "some of the time") for both testings except for the statement, "I can talk in front of a group," which received the more negative ratings of 3.16 and 3.04 for fall and spring. With seven possible ratings on the Semantic Differential as contrasted with only four choices on the Competence Scale, these findings are not surprising. The inability of bilingual Eskimo native children to express themselves articulately in the English language and the fact that it is considered bad manners to draw attention to oneself or to strive to stand out in a group (Chance, 1966) probably account for lower scores in this particular area of competence.

The pattern is not much different when the Eskimo student scores are divided by school and examined. Some variations may be noted, but the numerical values and the range of score differences are so small that the results must be interpreted very cautiously. Eskimo adolescents, when examined as a total group or as smaller subgroups, appear to consider themselves least competent in the area of speaking in front of people, for mean scores on this statement were lowest for the group and for individual schools. The ability to make new friends
received the most positive ratings from students as a total group and at separate schools, which would be consistent with their rather favorable ratings on the friendly-unfriendly scale of the Semantic Differential.

Evident again on the responses to this form is the tendency for Eskimos to take a neutral position in the evaluation of their competence in performing certain skills. Considered with this observation, however, should be the fact that the response categories may have forced the respondees into this situation. Rarely is one able to do something "all of the time" or "none of the time," and students may have found themselves limited to the two less polar descriptions.

Chance (1966) has stated that Eskimo children grow up believing that cooperation and generosity are necessary for survival. Brown (1968) sees sensitivity, honesty, and friendliness as Eskimo "students' own values." Through personal observation gleaned from over five years of living in Alaska, spending some time in native villages, and working with native students at the University of Alaska, this writer believes Eskimo youth to be gentle, somewhat passive, noncompetitive, very friendly, possessed of a refreshing sense of humor, and generally lacking in confidence and in the ability to express themselves in an articulate fashion. The data from this study would appear to lend support to most of the foregoing statements.
The purpose of this first question was simply to provide an overview of the general characteristics of native youth, as a framework for understanding the rest of the research. More penetrating analysis of the data which was accumulated through the testing instruments is provided in succeeding sections.

**Question 2.** Through analysis of variance of the raw score sums of student scores on each of the two self-report measures for fall and spring, an attempt was made to determine whether there were differences among student groups at each school. The data indicate that only on the spring administration of the Competence Scale was there a difference among the schools which was significant. Students at Bethel achieved significantly more positive total scores in the areas of competence measured by the test than did their peers at any of the other three schools.

This finding causes one to question what variables at Bethel would cause the students to be significantly different in their expressed feelings of competency from students at the other schools. Do living conditions at Beltz prevent growth? Does the strong ethical tone at St. Mary's produce feelings of guilt or inability to "measure up?" Is moving into the urban white society of Anchorage so demanding an experience that maintaining their equilibrium and establishing some kind of adjustment become the most that young students can achieve during their first year? Or are there very positive factors
at Bethel which foster growth? Living conditions are more similar to village life than at any of the other three schools--private homes, native families who are often relatives. Even though Bethel students made the poorest progress in school of the four groups of students, perhaps living in a familiar environment allows students the freedom to do more than simply survive the cultural shock of the transition--an interesting finding which deserves more study.

Study of the data in more detail and comparison of scores item by item, even though total scores showed no important variations, reveal that students did differ significantly on three items of the Semantic Differential. Students at Beltz saw themselves more positively than those at Anchorage and St. Mary's on the kind-cruel scale, and more positively than Anchorage on the likes to work-lazy scale. Bethel natives also rated themselves more positively than St. Mary's on the kind-cruel scale. The foregoing scores were for the fall testing only, and differences were not significant in the spring. Item 11, friendly-unfriendly, was rated in the spring more favorably by Bethel pupils than by those at either Anchorage or Beltz. Because total scores were not significantly different, however, these individual scale differences should be interpreted with caution. The chances are that such variations might appear in any group in any school.

Comparison of items on the Competence Scale shows significant differences on three items in the fall although total scores did not vary
significantly. Bethel students perceived themselves as more able to get good grades, to do their schoolwork right, and to talk in front of a group than other students. They were different from students at St. Mary's on all three statements, and from Anchorage and Beltz on two. Of these three items, however, the only difference which was maintained over the year was that of being able to speak in front of people. Apparently their feelings about their competency in school-related tasks were not as positive at the end of the year. This finding is borne out in the study which indicated that their school achievement fell short of that of other groups.

As stated before, Bethel natives were significantly different in total score from the other three groups, the reasons for which may be seen clearly from an examination of item comparisons. Five items showed differences significant at the .05 level, and Bethel students scored positively on all five. Over the year they appeared to develop more confidence than other groups in their ability to speak in front of people (mentioned earlier), to talk to strangers, to change their behavior when they desired, to solve their problems, and to decide things without too much trouble. These data give rise again to the question concerning whether there are indeed unknown variables at Bethel which contribute to increased feelings of self confidence.

In the spring, although they had shown no difference in the earlier testing, St. Mary's Eskimos felt themselves less able than
the three other student groups in their capacity to change their behavior when they wanted to, perhaps an expression of the emphasis on exemplary conduct and possible feelings of inability to meet the high standards set at that school.

Students at Beltz decreased enough in the spring in their confidence in talking to strangers to score differently from other schools. Native students typically use withdrawal and silence as a means of coping with a tense, anxious, or uncomfortable situation (Kleinfeld, 1972a), and dormitory living with white supervisors under stringent rule may have been responsible for this finding.

An examination of inferred self concept through the total scores assigned by teachers in their evaluations of their students showed no significant differences. Further analysis of each of the thirteen items on the Teacher Rating form, however, indicates that teachers differed significantly on eight of the thirteen evaluative statements. Two of these statements showed differences from three other schools, the others showing differences from only one or two schools. Anchorage teachers saw their students as significantly more active in participation in classroom discussions than the other three groups and less likely to make excuses to stay away from school than Beltz or Bethel Eskimos. St. Mary's teachers rated their pupils more favorably than one other school on four items--less nervous, less aggressive, not likely to use the pretense of being ill to stay away from school,
and more likely to work hard in class. They also assigned ratings significantly different from both Anchorage and Beltz in their feelings that their students were less likely to be depressed or low in spirits.

Bethel teachers rated their students' self-confidence significantly higher than the three other groups, a rating borne out by the students' self-ratings on the Competence Scale. They also rated their pupils' ability to work hard in class more favorably than teachers at Beltz and St. Mary's, again surprising because of their students' poor achievement record, and saw their students as less fearful than those at Beltz and Anchorage. Beltz ratings were positively different from one other school on one item but negatively different on seven items, especially the statement concerning the students' efforts to work hard in class, where they differed from all three other schools.

From the foregoing it appears that St. Mary's teachers evaluate their students' "mood" more positively than teachers at other schools, although the differences are distributed fairly evenly among the other schools. Bethel teachers seem to feel that their students exhibit more confidence than others. Significantly favorable ratings by Anchorage teachers all have to do with their students' classroom behavior. Beltz teachers evaluate their students more negatively than those at the other schools both in regard to mood and academic performance.
Remembering that St. Mary's and Beltz are boarding schools, it is reasonable to assume that the teachers there would be more aware of and familiar with the total personality of the native young people than would teachers at Anchorage, who only see their students in a classroom situation. St. Mary's is smaller than Beltz, and, as referred to previously, the Sisters and Brothers there live closely with the Eskimo students in an environment permeated with an overarching moral and ethical tone. Beltz is larger and more structured, with specific rules concerning behavior, especially in the dormitory, and students quite possibly maintain attitudes of resistance in the classroom.

Eskimos at Bethel live with native families in a community comprised almost wholly of people of their own culture, as previously stated, which fact may contribute to their growing feelings of self-confidence in a new situation. Not having to cope with a culturally different environment may provide them with the strength not only to maintain but to enhance their perceptions of self.

The special program mentioned before, called the "Rural Transition Center," which was started in Anchorage as a transition step for boarding home native youth from the village to urban life appears to have provided an environment which enables them to exhibit very positive classroom behaviors, as evidenced by the teacher evaluations of students in those areas of competence.
Question 3. Of paramount importance in this research is the question of whether young rural Eskimos experience significant changes in their self concept as a result of their being required to continue schooling in a cultural and educational environment vastly different from that of their life experiences during the critical adolescent years. To examine this question two self-report instruments for groups at each school were combined using canonical correlation analysis and compared through analysis of variance. The resulting figures indicate that there was no significant difference among the schools in the amount of change which occurred. Paired t-tests were then performed, using these combined scores, to ascertain whether there were in-school changes for each of the four groups of native students from fall to spring testings. No group evidenced a change of significance during the academic year.

These data lend credence to what is already known concerning the stability of the self concept. "Most theorists agree that a person's view of himself is resistant to change and that when change does occur, it is very gradual" (Hawk, 1967, p. 200). In addition, the self concept is seen to be structured at an early age:

At some time preceding middle childhood the individual arrives at a general appraisal of his worth, which remains relatively stable and enduring over a period of several years. This has been demonstrated by measurements obtained under similar conditions and with relatively similar instruments (Coopersmith, 1967, p. 5).
Unimportant or peripheral aspects of the self can often be acquired or changed fairly quickly, but the truly important changes in self concept, such as those related to values, attitudes, or basic beliefs, occur much more slowly and sometimes only after very long periods of time...

Generally speaking, the more important the aspect of self in the economy of the individual, the more experience will be required to establish it and the more difficult it will be to change it (Combs, 1972, p. 51).

The self concept is an organization of beliefs about the self which are learned as a consequence of experience, and "the most important changes in the self concept probably come about only as a consequence of many experiences repeated over long periods of time" (ibid., p. 50). Thus, while no significant changes are evident from the data presented here which concern a seven-month span in the lives of young Alaskan natives, the follow-up studies of these same groups over the next few years may provide markedly different results.

**Question 4.** The Dreyer and Havighurst (1970) findings indicated that there was a strong tendency for Eskimo boys in the adolescent age group to rate higher than girls in "self-esteem." An examination of this phenomenon was incorporated into the present research for the purpose of ascertaining whether the sample studied exhibited the same characteristic. Considered as a total group using combined scores the boys and girls showed no significant differences in their attitudes toward self. However, when the data were broken
down and the raw scores examined for each item, significant differences became apparent on three scales of the Semantic Differential.

Girls evaluated themselves less favorably on the strong-weak and good looking-ugly scales, while boys showed a significantly negative evaluation on the clean-dirty scale. Dreyer and Havighurst found the same result on the strong-weak adjective pair.

...the semantic differential concept "myself" contained the adjective pair "strong-weak" which as Havighurst notes elsewhere, tended to find boys rating themselves much more positively than girls; i.e., boys tended to rate themselves as being "strong," while girls tended to say they were "weak." The great differences in ratings on this one adjective pair tended to influence the overall rating for "myself"... (ibid., p. 9).

In the present study the differences in assigned ratings to the three scales mentioned were not large enough to influence overall scores.

These findings would seem to indicate that Eskimo children identify with sex roles which are traditional in middle-class western society, i.e., the weak female, the strong male, the pretty girl, the dirty little boy. Whether these feelings are a consequence of their familial experiences, of their eight years in elementary schools with Caucasian teachers, or of some other cause is unknown.

Question 5. As cited in Chapter II, several studies support the usefulness of the Semantic Differential as a measure of self concept with persons of a different culture, and several investigators
recommend the use of more than one instrument to maximize understanding of the construct of self concept. Mentioned earlier, too, is the fact that inferred self concept (self concept as determined by an outside observer) is a more realistic assessment of self concept than that which the person reports about himself. In the present study two self-report measures were used (one the Semantic Differential), a combined score was obtained to provide the most meaningful interpretation of the data, and teachers evaluated their students at the conclusion of the academic year.

Part of the research involved an investigation of whether there was a relationship between any of the measuring instruments used. In other words, did statements on the Semantic Differential requiring value judgments of personal characteristics bear any relationship to statements concerning skills? Did teacher evaluations coincide with pupil evaluations of themselves?

Correlations significant at the .01 level occurred between the fall and spring Semantic Differential tests, the fall and spring Competence Scales, between the Semantic Differential spring and the Competence Scale fall, and between the Semantic Differential spring and the Competence Scale spring. Apparently scores on the two self-report instruments remain fairly stable over the test-retest period of seven months.
Of interest is the fact that although the two separate forms showed no significant relationship to each other in the fall (.15), both the fall and spring Competence Scales showed a relationship significant at the .01 level (.29 and .39) with the spring Semantic Differential. What this appears to signify is that competencies, which concern skills and school-related tasks, perhaps began to be incorporated by the Eskimo adolescents into their global perception of self.

Dreyer (1970b) found that for Indian students (including a group of Eskimos) "self-esteem" was not related to school achievement, at least not to the extent that it appeared to be for white populations in most studies. The value placed on the "self" by Indian students seemed to be quite separate from performance in school. The low correlations found between the two self-report forms in the fall for this Eskimo sample would appear to support these statements. If young natives are going to be successful in school, then school achievement must become an important value for them, and the incorporation into the self concept of school-related skills may be viewed as a positive move toward this goal.

The teacher evaluations, completed in the spring, correlated significantly at the .05 level with the spring Competence Scale (.22), but evidenced no relationship to the spring Semantic Differential (.03). Concern in the Competence Scale is with school-related competencies, and it is reasonable to assume that persons involved with the
educational progress of the students would make evaluations of their students in these known areas more closely resembling those of the students themselves than in areas concerned with more personal feelings about self.
VI. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Although basic elementary school programs exist in most remote areas of Alaska, education for secondary school native youth is fraught with problems. Few communities have a sufficient number of adolescents eligible for secondary school education to justify the establishment of a village high school, and the majority of native students must either leave the state for high school instruction or must attend schools within the state which are far from their homes. The orientation, philosophy, and educational atmosphere differ widely from school to school; and little, if any, effort has been made to assess the effects of these varying educational experiences on the students who are exposed to them.

The purpose of this study was to investigate the self concept of Eskimo ninth-graders in four different secondary school environments in Alaska during one academic year. The research was undertaken to find out what happens to the self concept of the rural adolescent Alaskan native when he moves from the village into a vastly different social and educational environment.

Similar, ambiguous or conflicting results have been obtained by various investigators using a variety of instruments in their attempts to measure self concept. The research cited in Chapter II attests
to the fact that self concept is not only very difficult to measure but
that very few patterns of relationships can be found between the self
concept and other variables. The semantic differential, one of the
instruments used in this study, has been shown to be useful in mea-
suring self concept for persons of other cultural and linguistic back-
grounds--including Indians and Eskimos, Alaska's two native groups.

Studies of the self concept of Eskimos appear very rarely in
the literature, although Dreyer and Havighurst's (1970) Indian studies
included a small group of Eskimos. Results for the Eskimos, how-
ever, were not separated from the total group.

All of the Eskimo ninth-graders living in four chosen educa-
tional settings who were away from their home villages for the first
time were the subjects of this research. Because of various factors
detailed in Chapter III, of the 132 native ninth-graders at the four
schools, 90 met the criteria for inclusion in the sample. They were
divided as follows:

Anchorage - 30
Beltz - 35
Bethel - 11
St. Mary's - 14

The four secondary school environments selected for this study
differ fundamentally along a modernized western--traditional Eskimo
continuum, and may be described as follows:
1. Anchorage Boarding Home Program--urban white boarding home family and school,
2. Beltz Regional High School in Nome--white-oriented transitional town and boarding school,
3. Bethel Boarding Home Program--rapidly acculturating Eskimo transitional town, boarding home family, and school,

The three testing instruments, all of which were developed especially for this study, were as follows:

1. Semantic Differential - twelve adjective pair scales
2. Competence Scale - twelve specific behavioral statements
3. Teacher Rating form

The Semantic Differential and the Competence Scale were administered in September, 1971, and again in April, 1972. Teachers participated in individual student evaluative interviews at the end of the school year, which were recorded on the Teacher Rating forms.

By means of the data collected from these instruments attempts were made to provide answers to the following five questions:

1. What are the characteristics of the self concept of Eskimo adolescents?
2. Are there differences in the self concept of Eskimo students attending each of the four schools included in the study?

3. Are there changes in the self concept of Eskimo students in boarding homes and boarding schools over the period of a year?

4. Are there differences in self concept between male and female Eskimo adolescents?

5. Is there a relationship among the instruments used to measure the self concept of the students?

Conclusions

The present research indicates that Alaskan Eskimo adolescents are neither highly positive nor strongly negative in their perceptions of self. Utilizing for the most part more passive than extreme responses on both of the self-report instruments, they see themselves as adequate rather than superior or inferior and assign themselves a neutral position in their self evaluations.

Eskimo youth characterize themselves generally as friendly, helpful, and kind, modal Eskimo cultural values, but not particularly strong, good looking or smart. In the areas of competency which were explored in this study the Eskimo youth appear to feel most capable in the realm of making new friendships and experience the greatest difficulty in speaking before a group.
Examination of the differences between school groups on both tests reveals that only in the spring administration of the Competence Scale was there a difference which was significant. Students at Bethel achieved significantly more positive total scores in the areas of competence measured by the test than did their peers at any of the other three schools. Teachers at the individual schools showed no significant differences in the total evaluation scores which they assigned to the students. Specific item scores were significantly different at the four schools for both the student and teacher evaluations, but these differences should be interpreted with caution since, except for the one test administration mentioned above, total scores did not vary significantly. In general, students at Bethel showed the most positive characteristics, and teachers at Beltz evaluated their students least favorably.

The young natives in this study appeared to undergo no significant changes in their evaluations of self concept over the first academic year spent away from their villages, and most of the groups in the various settings did not differ significantly from each other either as they entered school in the fall or at the conclusion of the year. Bethel students appeared to strengthen their beliefs in their capacity to perform certain tasks more capably than other student groups.

Eskimo girls were significantly different from boys in their perceptions of themselves as being weak rather than strong and more
ugly than good looking, but they were more positive than boys on the clean-dirty scale. These scores reflect item variations, however, and total scores indicate no significant difference between boys and girls in their evaluations of self.

Correlations significant at the .01 level occurred between the fall and spring Semantic Differential tests, the fall and spring Competence Scales, and between the Semantic Differential spring and both administrations of the Competence Scale. Although the two separate forms showed no significant relationship to each other in the fall, the fact that both administrations of the Competence Scale showed a significant relationship to the spring Semantic Differential appears to mean that competencies, which concern skills and school-related tasks, seem to have been incorporated by the Eskimo adolescents into their global perception of self. Perhaps over the academic year achievement in school began to assume personal value for the Eskimo adolescents.

Recommendations

Concern among Alaskan leaders responsible for the provision of valid, relevant educational experiences for rural native youth is evinced by the proliferation of recent studies designed to give direction to Alaskan education in future years. In the year 1969-70 alone the State spent a total of $257,000 on studies. These were made by the
Advisory Council for State Financial Support to Public Schools ($18,000), the Stanford Research Institute ($179,000), and the Brookings Institution ($60,000). (Bowkett, 1970). While many of the investigations have dealt with the very real problems of the projected physical, economic, and social needs of the State and the likely resources available to meet these needs in the future, some have been concerned directly with the specifics of the educational milieu: attempts to provide teachers with new classroom capabilities designed especially for native children; improvement of educational media for children from different cultural backgrounds; provision of instruction in the smallest, most isolated areas; recognition of the necessity for direct involvement of native persons in decisions concerning educational needs of their children. Only recently, however, has attention been focused on native youth themselves, with in-depth investigation of the effects on young native students of their relationships with boarding-home parents, the qualities—from the students' own perspective—which make for productive interactions with these temporary parents, the characteristics of teachers who are successful with village students, the relationship of classroom climate to verbal participation of native students, and the effects of nonverbal communication of personal warmth on the intelligence test performance of village adolescents (Kleinfeld, 1972a, 1972b).
The importance of understanding the psychological dynamics of the young rural Alaskan native cannot be overemphasized if he is to have... maximum opportunity... for complete realization of his fulfillment as an individual and as a healthy, productive, participating, and accepted member of society in cooperation with the family and the home.  

If we accept the assumption that people behave and perform in terms of the way they view themselves, and effective learning will not occur until the concept of self is favorable enough to provide the learner with the belief that he is capable of learning (Vitro, 1971), then it would seem reasonable to consider the maintenance and enhancement of self concept as primary objectives in the educational program.

The present study is only a beginning effort to understand the psychological functioning of young natives by attempting to assess the nonmaterial trait of self concept through the medium of language.

The development of research methods appropriate to Eskimo students presents extreme difficulties because of the reluctance of natives to discuss questions of a personal nature. Communication among native peoples is achieved through indirect approaches, and Eskimo students consider direct questions a violation of their interactional norms. While the questionnaire is usually considered inferior to the interview

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Excerpt from the Philosophy of Education in Alaska approved by the State Board of Education on January 8, 1970.
in obtaining rich information about many topics, experience suggests that it may be more useful for rural native students as it avoids direct, face-to-face contacts (Kleinfeld, 1972a).

Broader investigation is needed concerning the most appropriate kind of testing media, however. Such study should perhaps involve the psychological dimensions of greatest concern to native youth and the discovery of the least threatening means of assessing these. It may be that the Semantic Differential, for instance, forces the subject to use unnatural bases of judgment and to attend to some dimensions he would not use otherwise in addition to those used spontaneously.

The Competence Scale used in the present research may have forced the students to use the middle alternatives in their answers, and the recommendation is made that the first and last choices be changed from "all of the time" and "none of the time" to read "almost all of the time" and "hardly ever," or some similarly less dogmatic statements.

Replication of this study needs to be conducted with groups at different age levels and with larger groups of Eskimos. A comparison with a control group of urbanized Eskimos might provide interesting data on possible differences in self perceptions. Fortunately, the present study is only part of a longitudinal project underway at the present time, the completion of which should furnish insight as to whether what might be cautiously interpreted from these data as
possible directional tendencies in the different schools are indeed distinct trends of behavior. As the study progresses, and if there are discernible variations in the behaviors and attitudes of native adolescents in the differing environments, investigation to determine the causal conditions of these variations seems mandatory.

This research has concerned groups, but the behavior of the individual is also of central concern to educators. Case studies of young natives who achieve varying degrees of success in school, in ability to adapt to new cultural patterns, and in facility in interpersonal relationships might provide some interesting and fruitful insights into life experiences which either foster or inhibit self growth.

Acculturation or assimilation are not per se negative processes. To be positive educational policies in Alaska must be keenly attuned to the effects these processes exert on young Alaskan villagers. Schools in Alaska face a dilemma today in this important task of developing and enhancing a positive concept in the self of rural native youth. The present research regarding the self concept of rural Alaskan natives will hopefully add to the understanding of Alaskan educators in their efforts to provide meaningful educational experiences for these young people.

The self concept has been shown to be a relatively stable psychological construct, changing only very slowly through experience and
learning. No end product of education, however, is more important than one's concept of self. As Combs (1970, p. 154) has said,

What might it mean... if we were truly successful in bringing about important increases in self-esteem for persons in all walks of life? The possibilities stagger the imagination! If we could accomplish this, even in part, for the discouraged, the defeated, and the deprived, we would change the very fabric of the society we live in.
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Dafoe, Don M. 1959. Some problems in the education of native peoples in Alaska. Unpublished research paper presented to Dr. H. Thomas James, Stanford University, Stanford, California. 71 numb. leaves.


APPENDICES
## Appendix A

**Semantic Differential**

**Myself**

<table>
<thead>
<tr>
<th>Good</th>
<th>Bad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean</td>
<td>Dirty</td>
</tr>
<tr>
<td>Strong</td>
<td>Weak</td>
</tr>
<tr>
<td>Good Looking</td>
<td>Ugly</td>
</tr>
<tr>
<td>Not Liar</td>
<td>Liar</td>
</tr>
<tr>
<td>Wise</td>
<td>Foolish</td>
</tr>
<tr>
<td>Kind</td>
<td>Cruel</td>
</tr>
<tr>
<td>Helpful</td>
<td>Not Helpful</td>
</tr>
<tr>
<td>Smart</td>
<td>Dumb</td>
</tr>
<tr>
<td>Likes To Work</td>
<td>Lazy</td>
</tr>
<tr>
<td>Friendly</td>
<td>Unfriendly</td>
</tr>
<tr>
<td>Generous</td>
<td>Selfish</td>
</tr>
</tbody>
</table>
1. I can get good grades in school
   ___ all of the time
   ___ most of the time
   ___ some of the time
   ___ none of the time

2. I can do my school work right
   ___ all of the time
   ___ most of the time
   ___ some of the time
   ___ none of the time

3. I can make new friends
   ___ all of the time
   ___ most of the time
   ___ some of the time
   ___ none of the time

4. I can talk to strangers
   ___ all of the time
   ___ most of the time
   ___ some of the time
   ___ none of the time

5. I can tell people things I want to tell them
   ___ all of the time
   ___ most of the time
   ___ some of the time
   ___ none of the time

6. I can talk in front of a group
   ___ all of the time
   ___ most of the time
   ___ some of the time
   ___ none of the time
7. I can change the way I act when I want to
   ___ all of the time
   ___ most of the time
   ___ some of the time
   ___ none of the time

8. I can find out things I need to know
   ___ all of the time
   ___ most of the time
   ___ some of the time
   ___ none of the time

9. I can find out how to travel where I want to go
   ___ all of the time
   ___ most of the time
   ___ some of the time
   ___ none of the time

10. I can find out how to do school work that I don't know how to do
    ___ all of the time
    ___ most of the time
    ___ some of the time
    ___ none of the time

11. I can solve my problems
    ___ all of the time
    ___ most of the time
    ___ some of the time
    ___ none of the time

12. I can decide things without too much trouble
    ___ all of the time
    ___ most of the time
    ___ some of the time
    ___ none of the time
APPENDIX C

TEACHER RATING FORM

MOOD

Please indicate how often (frequently, occasionally, seldom, never, or don't know) this student:

1. gets depressed or seems low in spirits
2. gets homesick
3. seems lethargic or withdrawn
4. seems fearful or quite apprehensive
5. seems agitated or quite nervous
6. is aggressive or hostile
7. stays away from class when he isn't ill
8. participates in classroom discussions

ACADEMIC PROBLEMS

9. Does the work seem too hard for this student? (Most of the time, sometimes, not very much, not at all)
10. Does this student work hard in class? (Most of the time, sometimes, not very much, not at all)

GENERAL

11. How would you rate the student's self confidence at the present time? (High, fairly high, somewhat low, very low)
12. How would you rate the student's mood at the present time? (Very cheerful, fairly cheerful, matter of fact, depressed)
13. How would you rate the student's general adjustment to this program? (Very good, good, fair, not very good)
### Appendix Table 1. Coefficients for Canonical Axis No. 1.

<table>
<thead>
<tr>
<th>Item</th>
<th>Semantic Differential</th>
<th>Competence Scale</th>
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<tbody>
<tr>
<td>1</td>
<td>1.29209687E-01</td>
<td>9.68411737E-01</td>
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<tr>
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<td>1.58721531E-01</td>
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<td>7</td>
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<tr>
<td>12</td>
<td>-2.36808434E-01</td>
<td>-5.44045514E-01</td>
</tr>
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Maximum correlation = 6.87302241E-01, or .69