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## ABSTRACT

Three million children being schooled in the educational system of America are expected to fcrego the use cf their native language while in the school environs and accept English as the mode of communication. To assess the effect of mode of language instruction on the student's concept of self as well as student achievement in reading, the following research was conducted. Suspecting that non-English-speaking parents are also affected by the school, a third measure was made of parent-school relationships. The research involved four village schools in the Kuskokuim district of Alaska having the Eskimo dialect of $\mathrm{Y} u \mathrm{k}$ as their vernacular. Two served as subjects. Treatment was the yuk Instructional program, wherein $\mathrm{y} u k$ was used as the primary language of instruction. The results were as follows: (1) control schools were significantly more advanced in reading as measured by the SRA Achievement Series; (2) treatment schools evidenced significantly greater concept of self on 6 of the 14 sections of the Yuk Hodified rennessee Self concept rest; and (3) total rapport of treatment school parents with the schcol was significantly more positive as measured by a parent opinionnaire. (Author)

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# AN ANALYSIS OF THE EFFECT <br> OF THE YUK DIALECT INSTRUCTION PROGRAM UPON STUDENT SELF CONCEPT, <br> STUDENT ACHIEVEMENT <br> AND PARENT-SCHOOL RAPPORT 

September 1973
U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

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## ABSTRACT

Three million children being schooled in the educational system of America are expected to forego the use of their native language while in the school environs and accept English as the mode of communication.

This research, of quasi-experimental design, assessed the effect of mode of language instruction upon the student's concept of self as well as student achievement in reading. Suspecting that non-English speaking parents are also affected br the mode of language accepted by the school, a third measure was made of parent-school relationships.

Four village schools in the Kuskokuim district of Alaska having the Eskimo dialect of Yuk as their vernacular, participated. Two served as subjects. Treatment was the Yuk Instructional Program, wherein Yuk was used as the primary language of instruction.

Results:

Control schools were significantly more advanced in reading as measured by the SRA Achievement Series.

Treatment schools evidenced significantly greater concept of self on six of the fourteen sections of the Yuk Modified Tennessee Self Concept Test.

Total rapport of treatment school parents with the school was significantly more positive as measured by a Parent Opinionaire.

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## INTRODUCTION

Schools are the institutions charged with the duty of educating. Two of the major purposes of education are: (1) to pass to the young of a society a mass of accumulated knowledge prescribed by that society as necessary for their youth to learn, and (2) to facilitate the acculturation of the young into the larger society. ${ }^{1}$

The task is not a simple procedure of placing an array of prescribed items in front of students for them to digest. A multiplicity of interacting forces confuse and disallow the success of such a plan. The problems do not normally arise in the choosing of what items shall be included in the knowledge package. This can, and has been negotiated and agreed upon. It is possible for members of a society to meet, discuss and agree as to curriculum composition, as evidenced by the syllabi produced by state and school. districts. ${ }^{2}$

[^0]The cause of much of the difficulty arises not from the knowledge but from the receivers of the knowledge. Showing students what they are to learn does not guarantee that they will proceed to learn it. Educators have long realized the task is complicated by the fact that students do not assimilate information at an equal rate, with equal enthusiasm, equal facility, nor are they able to use their perceptual senses equally well. ${ }^{3}$

Experts in human development and learning theory recognize that each individual is unique. To cope with this, educators may restructure knowledge to suit the receiver. The mass of elements which comprise the curriculum remain relatively unchanged in content but are fragmented into packages and units of varying shapes and sizes in order to appeal to a student's unique capabilities. Should the student be found to succeed best through the avenue of vision, materials will rely more on the visual approach. Should his auditory perception be more sensitive, knowledge will be presented more through aural methods. Deaf will be taught through the manual
${ }^{3}$ patricia Cayo Sexton, The American School (Englewood Cliffs, New Jersey: Prentice-Hall, Inc. 1967), p. 32.
alphabet or perhaps speech reading techniques. Adjustments in the structure of the classroom, the number of youngsters taught at one time, the length of the day, will be made for the neurologically impaired. The knowledge 'packets' may be doled out in smaller portions for the student able to profit at a slower pace. A reverse strategy might be suggested for the gifted individual able to digest material in grosser amounts. 4

Curriculum adjustments incorporated into school programs, such as the illustrations given, are tangential to Bruner's belief that all knowledge can be acquired if offered to the learner in small, abropos segments. ${ }^{5}$

A second premise of learning theorists closely related to the idea of dissemirating basically constant material in a varicty of 'packeges' is also important to this study. That is the assumption that learning is cumulative, or accrued. Teaching must be directed to the level and past experiences of the learner in order for acquisition

[^1]of knowledge to occur. The student has a reality which is the life he is living. He has himself and the world outside himself, which he takes in through his senses and refashions according to whatever has happened during past experiences. If the school is to be effective in its association with the student, it must admit to the reality of that self in the classroom. New learning must be built on the known. ${ }^{6}$ In Piaget's words:

> "The organism can assimilate only those things which past assimilations have prepared it to assimilate. There must be a system of meanings, an existing organization sufficiently advanced that it can be modified to admit the candidates for assimilation which accomodation places before it. There can never be a radical rupture between the new and the old; events whose interpretation requires a complete extension or reorganization of the existing structure simply cannot be accommodated to and thence assimilated. 7

Restated, the units of curriculum content should be varied and apropos to the learner and instruction should be geared to begin with the real level of the student.
${ }^{6}$ Hildegard Thompson, Indian Education, U. S. Department of the Interior, Bureau of Indian Affairs (Washington, D. C.: Government printing Office, March 1, 1962), no. 370.
${ }^{7}$ Patrick Mooney, "A Comparative Study of Achievement and Attendance of 10-14 Year Olds in Other School Organizations" (unpublished Ph. D. dissertation proposal, University of Florida, 1967) p. 32.

A third underlying assumption affecting the direction of the present investigation involves language. Credence is given to the belief that language is the personal property of the individual, establishing a sense of self. ${ }^{8}$ Because it does belong to a person, we dare not take it away. We should not demand that it be supplanted with another language, nor suppressed, nor ridiculed. We may only respect the language as a part of the human being, and perhaps ask that another language be added. Such an addition can occur only if the reasons for it are urferstood and accepted. Humans express their individual personalities and communicate their wants and desires through language. They are judged partly by what they say. Because of this, language is a very personal possession. ${ }^{9}$

It is the thesis of the present investigation that specific curriculum adjustments should also be made for youngsters who enroll in American schools and have as their basic form of communication a language other than English.

[^2]
## IIEED FOR THE STUDY

Most natious want their citizens to read and speak in the national language. Rarely a nation in the world does not have groups or sizeable sections of people who do not speak the native tongue. In the United States, the problem is widespread, from native Indians to each new flux of immigrants. Three million American school children come from non English speaking homes. 10 In New York City, one tenth of the total school population is comprised of students whose mother tongue differs from the national language. 11 Three hundred separate languages are spoken by the 600.010 American Natives living within the nation. 12 Schools have not questioned whether the learning of the national language is desirable.

10 Theodore Anderson and Mildred Boyer, BLlingual Schooling in the United States, January, 1970 (Austin, Texas: Southwest Educational Develomment Laburatory, office of Education, Department of Health, Education ard welfare) p.5.
$11_{\text {Nancy }}$ Modiano, "A Comparative Study of Two Approaches to the reaching of Reading in the National Language" (unpublished Ph. D. dissertation, New York University, School of Education, 1966) p. 12.

12 Report of the Subcommittee on Indian Education to the president of the United States, Robert $F$. Kennedy, chairman (Washington, D. C.: Government Printing office, 1969) p. 31.

The status of English as the official language of the United States has never been in doubt. The major cavil concerns the method of learning. 13

Results of educational programs for children with other language backgrounds have been discouraging. The Bureau of Research of the United States Department of Health. Education and Welfare sponsored an extensive study of the status of schooling for bilinguals in the United States. Two volumes of printed information, observations and descriptive data published in January, 1970, reveal bilingual youngsters in schools of the nation are not receiving quality education. Authors Anderson and Boyer state:
"Children with other language backgrounds not only are left illiterate in their mother tongue, but are also left illiterate in English."l4

13Modiano, "A Comparative Study of Two Approaches to the Teaching of Reading in the National Language," p. 15 .

14 Anderson and Boyer, Bilinqual Schooling in the United States. p. 20.

Referring to the general attitude of the $90 \%$ who speak the national language toward the $10 \%$ who do not. 15 the report states:

> "Negative attitudes exist toward non-English speech in the United States... Well-meaning Americans mouthe their acceptance of natives into the mainstream of united states life if they can 'operate' in our language and 'pass for one of us'."l6

Ex-Senator Ralph Yarborough of Texas, motivated by his belief that inequality of education exists for those who de not speak the national language, authored the first bilingual education bill ever introduced to either House of Congress, signed into law by president Johnson, in 1968. 17

Evidence $O \mathscr{E}$ the dissatisfaction of the nation with the status of education for bilingual children is substantiated by the seventy-six projects sponsored by the federal government during the $1969-70$ school year. Seventy-five million dollars was granted specifically

[^3]to encourage new approaches in the teaching of the nonEnglish speaking students. ${ }^{18}$

Further discouraging evidence regarding the schooling of one particular ethnic group was reported by Senator Robert F. Kennedy's Indian Education Committee. After tho years of visiting Indians in their homes and schools, traveling to all parts of the country, listening to government officials and to experts, and looking closely into every aspect of educational opportunity this nation offers its Indian citizens, the members concluded:
"...our national policies for educating American Indians are a failure of major proportions."19

Concern for the educational disabilities of the nation's Indian population has been further stimulated by the publication of current statistics, i.e. (1) the average educational level for all Indians is five school yodrs, (2) dropout rates for Indians are twice the national average, (3) eighteen dollars per year, per

18United States Department of Health, Education and Welfare, Office of Education, Projects Under the New Bilingual Education program, Reprinted from American Education (October, 1969), OE-30023.

19 Robert F. Kennedy, "Report of Robert F. Kennedy's Indian Education Committee," Inequality in Education, Center for Law and Education, Harvard University, number 7, p. 30.
child is spent for textbooks and supplies in Bureau of Indian Affairs schools--the national average is forty dollars, (4) nearly one-third of the entire tribe of forty thousand Navajo Indians are functional illiterates in English. 20

Increasing awareness of the status of the bilingual, minority group of Indians resulted in concern and dismay. Awareness also instigated concrete attempts by legislators and educators to impreve the education of the American native.

The Bureau of Indian Affairs of the United States Department of the Interior, had been operating 226 boarding and day schools for native Americans. 21 president Johnson issued a directive to the Bureau that administration of the programs was to be turned over to local boards. 22 Indian people were, for the first time, to be
${ }^{20}$ Report of the Subcommittee on Indian Education to the President of the United States. Robert F. Kennedy, chairman (Washington, D. C.: Government Printing Office, 1969)
$21_{\text {Robert }} F$. Kennedy, "Report of Robert F. Kennedy's Indian Education Committee," p. 31.

22 walter F. Monsdale, "Remarks on Submitting the Indian Education Bill to the Senate, "Inequality in Education, (Harvard University: Center for Law and Education, number 7), p. 2.
given authority and the responsibility of policy makers and permitted to structure the school curriculum for their children.

Senator Walter E. Monsdale and Senator Edward M. Kennedy, intent upon improving the lot of natives, jointly sponsored the Indian Education Bill. 23 A unique feature of the bill was that it did not simply provide some funds and set up administrative machinery to do more of what had been done in the past. It hoped rather to change the nature of what had historically been Indian education. Whereas education had been that "imposed by non-natives of white educational institutions," 24 a major component of the bil. stated all programs and projects were now to be planned, operated, and evaluated by tribal communities and parents of the native child affected.

A third attempt to rectify the condition of native education came in the form of a recommendation from Senator Robert F. Kennedy's Indian Education Committee as a consequence of their two year investigation. It is particularly cogent to the present proposed research.
${ }^{23}$ Ibid.
24 Ibid.

The opinion of the committee was that education for the native of the United States had been consistently unsuccessful, that it was still in a paltry condition and that much of the basis for its lack of success related to language. The committee recommended that programs to meet special, unmet needs in the Indian Education field be developed, emphasizing the "necessity for bilingual efforts. ${ }^{25}$

The present study attended to the effects of mode of language instruction upon one particular group of Anerican natives.

25 U.S. Congress, Senate Subcommittee on Indian Education, "Indian Education - A National Tragedy - A National Challenge," 1969 Report of the Committee on Labor and Public Welfare United States Senate S. Rept. 80, 91st Congress, lst Session, report no. 91-501 (Washington, D. C.: Government Printing effice, 1969)

Aleuts, Athapaskans and Eskimos of Alaska are expected to forget their native or mother tongue while in the school environs. Focus for this study was directed to the Eskimos of the Kuskokuim District of Alaska where the Yuk (YOOK) Eskimo Dialect is the vernacular.

Educational policy regarding mode of communication as stipulated for schools in the contiguous United States is supported in this district as well. That is, all instruction, both formal and informal verbal exchanges are conducted in English. 26

Specifically, the study involved three villages in the Kuskokuim district of Alaska wherein Yuk is the indigenous language. Children enrolled in the schools of these villages have traditionally received instruction, and been expected to converse in the national language, English.

In September 1970, first year children in the village schools of Akiachak, Nunapitchuk and Napakiak became the

[^4]subjects of an unique program of instruction. The medium of verbal exchange in these schools has been, since that date, the 玉skimo Dialect of Yuk. Instruction, conversation and all verbal interaction is now conducted in their mother tongue.

To date, no research has been conducted relative to the effectiveness of the program. Educators intuitively have suspected that the imposition of a national language on children with a differing mother tongue may have been the cause of severe learning difficulties, as well as attendant emotional strains on the concept the student has of himself engendered by a conflict between the home and the school. 27 The present research critically and systematically ascertained whether or not these intuitive reactions have been accurate.

The Yuk Dialect program of instruction in Alaska offered an opportunity for controlled research of comparative design. The present investigation assessed not only the effects of the mode of language instruction upon

27Cultural Bilinguals and Composition: Native American Education at the University of Oregon." Engl.ish for American Indians. Newsletter of the Office of Education, Bureau of Indian Affairs, U. S. Department of Interior, William R. Slager, ed. (Washington, D. C.: Government Printing Office, Spring, 1971) pp. 29-32.
the cognitive domain of student learning, but also on the effective aspect of student self concept.

The regard the home has for the school program relates to the effectiveness of that program. 28 Parents' attitudes may be transmitted to their young and reflected in the children's performances. 29 As previously mentioned, President Johnson's directive to the Bureau of Indian Affairs and a major stipulation of the Monsdale-Kennedy Indian Education Bill emphasized the immediate need to consider the native community in toto, when structuring educational programs for their young. For these reasons, the present research also measured parent attitudes as effected by the mode of language instruction in the school. Until such data was collected and analyzed, the value of the 'Yuk Educational Program" was unknown, and efforts to improve or change programs in schools with clients from bilingual homes could not be based upon systematic evaluation.

28 patricia Cayo Sexton, The American School, p. 2. 29 Ibid. . pp. 59-61.

## HYPOTHESES

Three major hypotheses were tested.
$\mathrm{H}_{1}$ : Students in the Yuk Eskimo Dialect school program have more positive self concepts than students in traditional Eskimo school programs.
$\mathrm{H}_{2}$ : Students in the Yuk Eskimo Dialect school program have a higher level of achievement in reading than students in traditional Eskimo school programs.
$H_{3}$ : Parents of students in the Yuk Dialect school program have more positive attitudes toward the school programs.

## REVIEW OF THE LITERATURE

This chapter has as ita focus theory and research in three major areas which bear directly upon the present investigation: (1) language research; (2) self concept theory and research; and (3) studies of parent-school relationships.

## LANGUAGE RESEARCH

Controlled study of the effects of the mode of language in American schools has been difficult to accomplish in the past. Traditionally, as previously mentioned, schools in the United States suppress the use of the mother tongue if different from English. 30 A smattering of teachers have attempted styles of bilingual programs, but on a sporatic subjective basis, making controlled comparative studies difficult to complete.

Studies that were undertaken in this nation tended to assume English was to be learned and used for instruction. For the most part researchers would, therefore, focus upon developing better methods of instilling the national language upon children from homes of a different

[^5]mother tongue. 31 Interest was not in analyzing the merit of teaching different patterns of language. 32 Nor has clinical inquiry into the emotional dynamics of language learning usually been a subject of incerest. ${ }^{33}$

Internationally, previous studies concerned with monolingual, bilingual, national language or vernacular education have also most frequently been in the nature of surveys. They have resulted in valuable inventories of existing programs, 34 but here, too, comparative studies with controls of experimenter bias have been rare. ${ }^{35}$

Two major projects that were comparative in design were completed by Orato in the Phillipines in 1953, and
${ }^{31}$ Lloyd $s$. Tireman, Teaching Spanish Speaking Children, (Albuquerque: The University of New Mexico Press, 1948).

32Marjorie Smiley, "Research and Its Implication," Excerpts from Speeches of Conference on Improving English Skills of Culturally Different Youth, pp. 35-61.
${ }^{33}$ Ibid.
34Modiano, "A Comparative Study of Two Approaches to the Teaching of Reading in the National Language, "p. 9.
${ }^{35}$ Pedro T. Orato, "The Iloilo Experiment in Education Through the Vernacular," The Use of Vernacular Languages in Education (Paris: unesco, 1953) pp. 123-131.

Modiano in Mexico, in 1966. Both stressed the importance of language mode upon the cognitive domain of the students. Orato investigated academic advancement. 36 Modiano's interest lay in measuring whether a monolingual or bilingual approach results in greater success in learning the national language. 37

Lacking in the literature is data relating the effect of language mode upon the affective sphere. Accepting the belief that all human behavior is motivated by an individual's concept of self ${ }^{38}$ leads to the importance of the study of the effect of mode of language instruction upon student self concept.

## SELF CONCEPT THEORY AND RESEARCH

Increased interest. in theories and research concerning the self is evident in the literature of the past thirtyfive years generated by such scholars as Chein, Sarbin,

## ${ }^{36}$ Ibid.

37Modiano, "A Comparative Study of Two Approaches to the Teaching of Reading in the National Language."

38 Arthur W. Combs and Donald Snygg, Individual Behavior: A Perceptual Approach to Behavior, (New York: Harper and Row, 1959) p. 78.

Rogers. Snygg and Combs. ${ }^{39}$ All agree that the regard a person holds for himself directs his adjustment and behavior. His ideas about himself are his most important ideas. Cabianca suggests that positive experiences and associations with others are needed in order for an individual to maintain and enhance his adequacy. 40

The self is basically a social structure formed in an organized manner through social experiences, states Mead. When these patterns are accepted into the conscious concept of self, psychological adjustments result and the individual becomes comfortable and free from tension. 41 Theorists such as Snygg and combs believe that all human behavior is directly related by this need of the individual for enhancement. 42
${ }^{39}$ Ruth C. Wylie, The Self Concept: A Critical Survey of Research Literature (Lincoln: University of Nebraska press, 1961), p. 317.

40 William Angelo Cabianco. "The Effects of a T Group Laboratory Experience on Self Esteem, Needs, and Attitudes of Student Teachers," (Unpublished doctoral dissertation, Washington State University, 1967), p. 25.

4icarl R. Rogers, "The Organization of Personality," American Psychologist, II (September, 1947), p. 364.

42 Combs and Snygg, Individual Behavior: A Perceptual Approach to Behavior, p. 78.

Giving Gredence to the assumption that behavior is powerfully influenced by the concept of self makes the researcher recognize the importance of study of self concept. By studying the differcices in people's self concepts we will then understand the differences in the way people are now and how they will act in the future. Most important, believes Dr. William H. Fitts, we should be able to help people change themselves and their behavior when we can learn how to help them change their self concept. 43

Combs, in discussing how self concept might be improved, holds that when people feel threatened:
"(a) their perceptions become narrowed to the threatening events, and (b) they are forced to the defense of their existing perceptual organizations. The more secure the individual self, the less he will feel threatened by events and the more open he can be in relating to the world about him."44

An individual is only able to explore his perceptual field and discover new experiences of which he has never

[^6]been aware, notes Rogers, when there is the absence of threat. 45 He empi.asizes that the absence of any factor which might attack the concept of self permits more effective changes in one's self image.

Theory of self is intricate, complex and incomplete. Common agreement of most of these writers is found in the promise that a positive effect can be made on how a person sees himself only in the absence of threat.

Further agreement is found with the hypothesis that verbal reports of conscious experience are valid. Analysis, tests and rating scales constructed on verbal production are reasonable. 46 According to Wylie, no research as yet has proven that unconscious self concept measures predict as well, let alone better, than conscious self concept measures. 47

45 Rogers, "The Organization of Personality," p. 365.
46Irwing G. Sarason, Personality: An Objective Approach (New York: John wiley and Sons, Inc., 1966), p. 101.

47Wylie, The Self concept: A Critical Survey of Research Litexature, p. 318.

Generally, research involving self concept can be categorized as follows: (a) investigation concerned with the influence of antecedent factors upon resulting self concept; (b) investigations concerned with antecedent conscious self concept upon resulting behaviors; and (c) investigations conserned with the relationships between conscious self concept and possible relevant variables, without interest in the antecedent-consequent direction. 48

## RESEARCH OF PARENT-SCHOOL RELATIONSHIPS

The current popularity of the concept of school accountability and the frequent occurrence of school bond election failure has let to research concerned with the community's regard for the school. Logic dictated that assessing the emotional temperature of local inhabitants would aid school administrators. Data of the mood of the paients it was believed would have an immediate effect upon the financial support given to the school. 49

Considering the emphasis placed on the assessment of - • - amets public opinion in the philosophy of school-community

$$
48_{\text {Ibid. }} \text { p. } 4 .
$$

49 Simpson.: Robert J. "Does PR Breed False Security?" Mıchigan Educational Journal. 41 (January, 1964), pp. 5-8.
relations, it is surprising that so little research has been conducted on matters of methodology. Charters states that while public relation researchers seem to be adept with techniques of population sampling, methodological developments for measuring opinion and attitude are for the most part lacking. 50

Hand did construct a questionnaire to measure what people want from their school and what they think they are getting. ${ }^{51}$ Downey authored an instrument to assess the public's views on the tasks that public education should perform. ${ }^{52}$ Neither instrument claims reliability or validity statistics to justify widespread use.

The majority of studies over the last fifty years are of two kinds: normative and status. Normative surveys are collections of professional opinions on the values of public relations techniques and programs. Status
${ }^{50}$ Charters, Jr.. W. W., "Public Relations," Encyclopedia of Educational Research, 4 th edition, ed. by Robert L. Ebel (London: Collier-MacMillan Limited, 1969) p. 1031.
$5 l_{\text {Hand, Harold, What People Think About Their Schools }}$ (New York: Harcolurt, Brace Javanovich, Inc.. 1948).

52 Downey, Lawrence $w$. , The Task of public Education (University of Chicago: Midwost Administration Center, 1960).
studies describe a set of circumstances related to public relations at particular time and place.

Normative studies opines Charters, are in some ways curious. A list of public relations techniques is assembled by the investigator and then submitted to some authoritative jury to rate in respect to their effectiveness. The ratings are than statistically compiled according to their judged effectiveness. 53 The curiousness lies in the practice of substituting consensus of opinion for empirical testing of cause-effect linkages such as displayed in Miller's work completed in 1943.54

Particularly cogent to the present investigation are the studies which have related the effectiveness of student's educational programs and student achievement to the status of the home.

There has emerged over several decades of research a well-supported theory of interactionism that holds that "intellectual development results from a dunamic interaction
${ }^{53}$ Charters, Jr., W. W., "Public Relations." p. 1032.
54miller, Delmas, "An Appraisal Technique for Programs of Public School Relations" (unpublished doctoral dissertation, University of Pittsburgh, 1943).
between genetic and envirommental variables."55 Ancording to this theory, control of the stident's environment and gaining support of the student's family has the potentiality of affecting the student's success to the point of advancing acadenically, or failing.

As specified in the Elementary and Secondary Education Act of 1965, federal funds are being used to strengthen programs such as liead Start. Other programs for preschool children emphasizing the need to include parents in planning the child's education are evident in every state of the nation. All stress the positive effect that close ties between parent and school can have on the academic advancement of the child.

Deutsch's research in 1964,56 and Wolf's the year following. 57 lent further support in reaffirming the

55Ritsher, Cynthia, "Pupil Progress," Encyclopedia of Educational Research. 4 th edition, ed. by Robert $L$. Ebel (London: Collier-MacMillan Limited, 1969) p. 1057.

56 Deutsch, Martin, "Facilitating Development in the Pre-School Child: Social and Psychological Perspectives." Merrill-palmer Quarterly, 10: 249-64, 1964.

57Wolf, Richard M., "The Measurement of Environments," Proceedings of the 1964 Invitational conference on Testing problems. ETS. 1965. pp. 93-106.
importance of parental expectations and aspirations upon student success.

Speaking to the topic of educational format for the future, Bloom in 196,5 said:
"Much of the educational effort, especially at the pre-school level will be directed toward parents because of the realization that parents inevitably play important roles in the success or failure of their children." 58

Interestingly, Soviet educators have apparently come to agree that there is a crucial need for home-school rapport. In 1967, the Ministry of Education for the Russian Republic announced a program which encourages mutual planning between the academes and parents to give children a head start. 59

58 Bloom, Benjamin s., "Twenty-five Years of Educational Research, American Educational Research Journal, \#3:213 3:1966, p. 213.

59Ritsher, Cyntha, pupil progress, p. 1057.

## DESIGN OF THE STUDY

## POPULATION CHARACTERISTICS

General Information
Most current estimates put the number of Eskimos. Indians and Aleuts residing in Alaska at about 55,350 people. 60 Eskimos comprise slightly more than haif of the total native population. Seventy per cent of them live in villages on the western and northern coasts of Alaska along the Bering Sea and the Arctic Ocean. 61 Some Eskimos have shifted co cities in Alaska, or migrated to other states. The popular assumption that villages are vanishing, however, is not true. Thirteen fewer separate native communities (of twenty-five or more persons) are existing today than were in the 2950 census. However, over eighty per cent of those continuing to exist are larger than they were seventeen years ago. More than half are growing more rapidly than the estimated rate of

60Governor's Commission on Croes-Cultural Education, Time for Change in the Education of Alaska Natives, Charles K. Ray, Chairman, Juneau, Alaska: State Department Printing Office. 1970. p. 1.

61 Ibid. . p. 2.
net natural increase. The population of 2968 was a third larger than it was in 1950.62

It is a young population, with a median age of $16: 3$ years. Madian family size is 5.3 persons. 63

Eskimos are citizens of the United States and of Alaska. As aboriginal people they have special status under federal law. They hold political office, pay taxes, serve in the armed forces, accept and exercise the rights and duties of citizens, and are not, as occasionally mistaken, wards of the government.

## Livelihood

Year round jobs in most villages are few. Only one-fourth of the work force has continuing employment. 64 Food gathering activities provide basir subsistence. Supplementary edrnings come through the saie of furs, fish,

[^7]arts and crafts, as seasonal construction workers, cannery workers or fire-fighters.

## Health

The average age of death for all Alaskan natives, including Eskimos, is half that of other Americans. The death rate is more than twice that of white Americans. 65 Discouraging though this statistic may be, it is encouraging to note the rate of death in 1968 was one-half what it was in 1951.66

The three principal causes of death in 1966 in the Eskimo population were influenze and pneumonia, diseases of early infancy, and accidents. One-fifth of the total deaths for the same year occurred in persons under one year of age. 67

## Education

Adult Eskimos are likely to have less than an eighth grade education. ${ }^{68}$ Native children in the elementary and

$$
65_{\text {Ibid. }} \text { p. } 10
$$

$6^{6 \text { Ibia. } .}$
${ }^{67}$ Ibid. . p. 11 .
${ }^{68}$ Ibid. . p. 6.
secondary schools of Alaska comprised one-fourth of the student population in 1969.69 Over half of these attended schools in villages as previously described.... predominantly native cummunities, small and remote, characterized by low levels of formal education among adults, widespread use of native languages, reliance upon food gathering, seasonal employment and welfare payments as economic bases. ${ }^{70}$

Schools in the villages are operated directly by the State Department of Education of Alaska, or the United States Bureau of Indian Affairs.

SAMPLE FOR THE PRESENT RESEARCH
The present study involved four villages of the Kuskokuim District. Inhabitants of these communities, other than a few families such as those of the village school teachers, are all Eskimo. All four of the schools are administered by the Bureau of Indian Affairs Education Depaitment of the United States government. The indigenous language of all of the communities is the Eskimo Dialect of Yuk (pronounced YOOK).
${ }^{69}$ Ibid. . p. 13.
70 Ibid.

Instruction has been in English. Until quite recently, students who used the vernacular, even for informal verbal exchanges with their peers, during the school day were punished. 71

Proposals to offer an educational program to native children of Alaska in their own language had been totally rejected by the legislature. With the passage of the Federal Bilingual Act in 1968, the time was opportune to resubmit a proposal.

Irene Reed and Pascal Afcan of the department of Linguistics at the University of Alaska, together with their assistants, were directed to begin translation of materials for instruction of reading, writing, social studies and math, from English texts into the Yuk Dialect.

In September of 1970, children entering school for the first time in the villages of Akiachak, Nunapitchuk and Napakiak began learning under the new regime. That is, Yuk was used, and has continued to be used, as the primary language of instruction.

First year children in the three villages of Kwethluk, Napasiak and Kasigluk continued to be schooled

[^8]in the traditional format. English, in other words, has remained the medium of verbal exchange.

## METHODOLOGY

The study was quasi-experimental in design. First Year students in the village schools of Akiachak, Nunapitchuk and Napakiak were to serve as subjects.... the 'Yuk program of Instruction" was considered treatment, and first year students in the village schools of Kwethluk, Napasiak and Kasigluk would function as control,

Three instruments were used in the investigation of student self concept, student achievement and parent attitude. They were chosen as the hest available to test the hypotheses.

THE YUK VERSION OF THE TENNESSEE SELF CONCEPT SCALE (YTSCS)
The Tennessee Self Concept Scale was developed by ritts ${ }^{72}$ as a measure of self concept. Work of the TSCS began in 1955 with the purpose of developing an adequate instrument on the self concept to assist in bringing together many research and clinical findings. A large mass of self descriptive items derived from other measures

72William F. Fitts, Tennessee (Department of Mental Health) Self Concept Scale Manual (Nashville: Counselor Recordings and Tests, 1965).
and from written self descriptions of patients and non-patients were gathered and classified. Clinical rsvarologists fringed the items, classifying them into a system from which the v obtained a Total Positive Self Score. Fourteen scores in all of person's reperd for self are derived from the ISCS. ${ }^{73}$

Pits claims that the ISCS is probably the most universally applicable instrument for measuring self concept end refers to its use with high school students, delinquents, soldiers, nursing students, mental patients, and others.

The test manual presents evidence of extensive treatment for test validity and reliability. A reliabilaity coefficient of .97 for total Positive Self Score was found tuning test-retest methods on sixty students attending college over $A$ two week period.

The instrument requires that students read and respond to the items in English. Because of this, the instrument was modified to slow the examiner to read the items to the examinees. Subjects in the present

[^9]investigation might not be capable of reading. They were capable of indicating their reaction to the spoken items on the answer sheet. Also, in order to present the items to the children in the vernacular, all items were translated by Pascal Afcan, a linguist at the University of Alaska, into the Yuk Eskimo Dialect.

The modifications of the original instrument were approved by its originator, Dr. William Fitts. His opinion that the scores would not be negatively affected by the alterings is based upon the stable resuits obtained in previous research in which the instrument was translated in French, Spanish and Greek.

THE SRA ACHIEVEMENT SERIES, LEVEL 1-2, READING FORM C
This instrument, popularly used throughout classrooms in many states including Alaska as a measure of student academic achievement, was used in this study to produce reliable, comparative advancement o: the three subject classes and three control classes. The eventual educational goal of all six classrooms is to graduate students able to read, write and function in an English-speaking culture. For that reason, we wished to obtain a measure of how well the students are advancing toward that goal and presented the scale in its original form, English.

The basic function of the SRA Achievement Series, Reading 1-2, Form C is to measure pupils' basic achievement in the broad curricula area of reading.

Total reading proficiency is ascertained through a tally of four sub areas: (1) verbal-pictorial association, (2) language perception, (3) comprehension, and (4) vocabulary.

Total testing time, including the distribution of materials, the reading of directions, testing and rest periods equals three hours and five minutes. To minimize the length of any one session, testing has been spread over four separate periods.

The test emphasizes power rather than speed, so examinees are not pressured by time in answering and should be able to present their peak performance.

The SRA manual reports a correlation between the vocabulary and comprehension sub-tests of .73. ${ }^{74}$ Alternate forms correlated . 83 when administered with a year's separation. ${ }^{75}$ Reliability is comfortably high considering the long time interval between testing.
${ }^{74}$ SRA Achievement Series, Examiner's Manual, (Chicago, Illinois: Science Research Associates Incorporated, 1965). ${ }^{75}$ Ibid.

Assessment of the validity of the test could be obtained by correlating it with other popularly used reading tests. The authors report no such information on concurrent validity.

John T. Guthrie, reviewing the battery for Buro's Mental Measurement Yearhook, reported he could not locate any studies anent such data conducted by others. Guthrie felt the usability of the test to be substantial since it allowed for administration and interpretation of results by teachers with no special training. 76

Since the present study chose to analyze between group achievement and would have no need to refer to national norms, and since the administrators of the instrument would be unsophisticated in psychometric testing, the SRA Achievement Serjes, Level 1-2, Reading, Form $C$ was an apt choice.

YUK PARENT OPINIONAIRF.
The Yuk parent opinionaire is an original instrument composed of a personal statistics section, plus four general sections reflecting parent opinion toward the school.

76 John T. Guthrie, The Seventh Mental Measurement Yearbook, ed. by Oscar Krisen Buros (Highland Park. New Jersey: Gryphon P:ess, 1972) vol. II, pp. 706-707.

As in the method of construction of the Tennessee
Self Concept Scale, a pool of items was derived from other parent inventory opinion polls, plus descriptive statements offered by personnel in the educational public relations field. The compiled items were gleaned from James Hymes Index. ${ }^{77}$ How the Nation Views the Public Schools, ${ }^{78}$ Harold Hand's Community Survey, ${ }^{79}$ and a survey questionaire. ${ }^{80}$

The four major sections of investigation were:
(1) Information, (2) Communication, (3) Attitude, and
(4) Rapport.

The length of the opinionaire was kept short to increase its chance of being completed by all the chosen subjects with little inconvenience to them. The opinionaire
${ }^{77}$ James Hymes, Effective Home-School Relations (New York: Prentice-Hall, 1953).

78 George Gallup, How the Nation Views the public Schools (Princeton, New Jersey: Gallup International, 1969).
${ }^{79}$ Harold Hand, "Illinois Inventory of Parent Opinion," What People Think About Their Schools (New York: Harcourt Brace Jovanovich, Inc., 1948).
${ }^{80}$ Highlights from 1971 Opinion Survey Metropolitan public School, Nashville, Tennessee (Denver, Colorado: Research Services Inc., 1971).
'otaled thirty-nine questions in all. Fourteen of these, by cheir very nature, produced knowledge of the degree of rapport between the respondant and the school. The face value of such questions as, "Do you know the name of your child's teacher this year?", "What is your child learning ar school this year?", or "Does your child tell you about school?" indicate to some degree how close the parent was to the school and his awareness of its machinations.

Items of a more attitudinal nature were rated on a three degree scale of "most important," "somewhat important." and "least important." As examples, the question "Would you like your child to become a teacher?" was weighed as "most important." "What subjects do you think should be taught?" was considered "somewhat important." "What do you think of the school building?" ranked as "least important."

Still, question of the validity and reliability of the instrument would be justified. No conclusions as to positive or negative relations between parent and school was therefore attempted in this study. No individual respondent was raied as evidencing strong or weak rapport with the school. Results are reported as intact groups
relating trends of how one village group of parents compare to another village group of parents.

## DATA COLLECTION

Some altering of the data collection dates had to occur due to unforeseen events. One of the selected villages had a 'white out' and was snowed in, making it necessary for the examiner's schedule to be adjusted. It was hoped that the three measures would be obtained after the children subjects had been enrolled in the program for two academic years, placing the date of data collection at June, 1972. With the delays caused by inclement weather, communication interruptions, and students leaving the school situation to go to fish camp sooner than expected, the date when all data was gathered was advanced to June, 1973.

The SRA Achievement Series test was administered to the subject and control groups by the classroom teachers, as a group test. during the school day.

The Yuk Modified Version of the Tennessee Self Concopt
Scale was administered to the classes en masse, also during the school day. It was, as previously mentioned, delivered in Yuk.

The Yuk parent opinionaire required that the parents of the children be assembled at the schools at the close of the regular day's session. The questions were read to the parents in Yuk, their vernacular.

TREATMENT OF THE DATA
Composite scores were obtained from the Yuk Modifjed Version of: the Tennessee Self Consept Scale and the SRA Achievement Series, Level 1-2, Reading, Form C. Grcups were handed intact, rather than relating one village as opposed to another. Non-parametric statistical methods were chosen as the only justified manner in which to harde the data, as normal distribution was questionable. ${ }^{81}$

We chose to keep the two Yuk schools as one score and the two English schools as one score. This method, however, would not point out any variance in a school because of teacher, support of one local school superintendent over another, or other possible intervening factors. Given that the sample population was so meager, testing for the effect of intervening factors seemed unsound.

[^10]Categorical scores were obtained from the Yuk Parent Opinionaire. Non-parametric statistics were applied to test the difference between the two groups for the reasons stated previously. 82
${ }^{82}$ Rupert Klaus, Ph.D., statistician, opinion given at conference, Murfreesboro Board of Education Central Office, Tennessee, January, 1971.

## STGNIFICANCE AND LIMITATIONS OF THE STUDY

## Significance

Few studies have been reported which investigate the relative merit of teaching bilingual children in the national language as compared to teaching in the mother language. Fewer studies still have focused on variables other than the cognitive domain. Attempts to measure effects on student self concept in such programs is virtually non-existant.

Parent support of the school program has been considered an important ingredient in the degree of success the program will have. It is possible that the united States school policy of disallowing students of a home language different from English to use their home language While in school has affected the support the parents might give. The school may have weakened the chance of building a bridge of common interest by renoving the beams of communication.

If this study sheds some light upon ihe effect of this program of Yuk Dialect Instruction upon student self concept and parent school rapport, it will provide useful information for future participants in the program.

Results may also be germane to the many schools in other parts of the united States with clients from bilingual homes.

## Limitations

$x t$ is recognized that generalizability from the findings are limited by the lack of programs explicitly like the present one in nature, having the unique locale and population to be studied,

A basic weakness of the design might be considered to be that the subjects were not assigned randomly, Though an attempt was made to check the matched equality of the groups as to age, sex, language, etc, it is feasible that other uncontrolled variables filtered into the program. Lastly, as this was field research, rather than a laboratory study, conditions, though more realistic, were not as easily controiled.

This chapter presents an analysis of the data obtained through the use of three evaluation instruinents employed in the present investigation. The methods used in analysis of the data as well as the statistical results will be described for the SRA

Acinievment Series, Level $]-2$, Reading, Form $C$ (SRA), the Yuk Modified Version of the Tennnessee Self Concept Scale (YTSCS), and the parent opinionaire. POPUILATION SURVEYED

Four villages participated in the study, two serving as control and two filling the role of treatment subjects. All students who began schooling in Septenber, 1970, in the four village schools completed the YTSCS and the SRA. Their parents were to complete the Parent Opinionaire.

Tests were administered in the spring of 1973. By June, 1973, all raw data had been collected and inferential statistical analysis beyan.

Table i presents a tally of the population surveyed. The names of the three tests are shown along the vertical axis. Names of the four participating villages head the columns, with treatment villages noted by an asterisk. The number of respondents from each village for each test is plotted on the chart.

# FABtit: I - Tally of Respondents to SRA, Parent Opinionaire and YTSCS for Four Villages 



| Parent |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Opinionairo | 0 | 15 | 24 | 8 |

*vijages using the Yuk Educational program in their schools Data received from tine control village of Kwethluk on tine Parent opinionaire was considered to be of questionable Value for two reasoins. First, more than half of the opinionaires were returned only partially completed. Second, it was assuned that the test was administered in a group session, or there had been a groat deal of interaction during the test session, for questions that were answored received exactly the same response on all the parents' answer sheets.

Data fron the villages of Napaskiak, Napakiak and Nunapitcnuk on the parent opinionaire reflected the personalized responso of each participating parent. The Kwothiluk thethoa of reaching an opmion by consensus resulted in data which did not present a viable basis for comparison with the other villages and was thorefore deleted from analysis. This decision is manifested on Table $I$ by the zero for farent Opinionulre returns under kwetinluk.

Raw data was recorded on Parent Opinionaire Tally Forms devised for the dual purpose of improving the manageability of the information and providing the researcher with a composite view of responses from each village. It was thus possible to detect general trends and reactions with but a glance. This technirque made the unxform responses of Kwethiuk immediateiy apparent.

## Opinionaire Design

The Parent Opinionaire includes 39 questicns grouped 1nto the four categorios of: Information, Commanications, Attitude and General Rapport. Measurablo scotes were assigned to each question by use of the following methodology:
a) Each of the catogorical sections was assignod an orimal value representative of its respective importame to the total measurement of parent dteituda. Using rishburn's ${ }^{83}$ ordmal medsure technique, the rankings were converted to probabisltios totaling l.0 for the total tost. The respectiva probajilif aes wore then multhplied by the total test acort (100 points), to arrive at individud catcaory scoros. Findily the scores wore subjectively adjunted to accomodate fudgrea iaffaronces; betwenn poired categories, as illustrated 1n Tabll 14 on paga 48.
ij) Witam ract eategory, tine questabss worc labeleri


 Maren, 1963, V. 13, 1p. 217-237.

TABLE II - Individual Category Scores for Parent opinionaire

| Category | Importance <br> Ranking | Computed <br> Probability | Computed <br> Points | Adjusted <br> Points |
| :--- | :---: | :---: | :---: | :---: |
| Information | 4 | .1 | 10 | 15 |
| Comunications | 1 | .4 | 40 | 35 |
| Attitude | 2 | .3 | 30 | 30 |
| General Rapport | 3 | 1.0 | 20 | 100 |

Sets of Inequalities Measure Technique ${ }^{84}$, the ranked quescions were then assigned probabilities. rhus, when multiplied by the number of points assigned to the category, an individual question point allocation resulted. Small adjustments to total category scores were required due to unit rounding of individual questions.

TABLE III - Category Point Allocation for the Parent Opinionaire


$$
24_{1 \mathrm{~b} 2 \mathrm{~d} ., \mathrm{pp}} 217-237 .
$$

c) Most of the questions required qualitative responses. The qualitative responses were transformed to quantitative scores by the coding methodology described in Table IV of the Appendix.

Descriptive Statistics
The means of the categorical sections and the overall total are shown below:

TABLE V - Means for Parent Opinionaire

| Village | N | Test Section |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | I | I I | II I | IV | Total |
| Napaskiak | 14 | 8.9 | 22.3 | 23.7 | 11.6 | 66.4 |
| Nunapitchuk* | 8 | 11.8 | 23.1 | 24.4 | 13.3 | 72.5 |
| Napakiak* | 24 | 8.3 | 21.9 | 25.6 | 14.5 | 70.3 |
| TOTAL | 46 | 9.1 | 22.2 | 24.8 | 13.4 | 69.5 |
| Yuk Average | 32 | 9.1 | 22.2 | 25.3 | 14.2 | 70.8 |

Non Parametric statistics
Student $T$ and $F$ tests were rejected for analysis of this measurement because of the required assumption that the sampled populations are normal. The principle reason for rejection was the lack of prior use of the Parent Opinionaire test on a large sample of the population. A Chi square Goodness of fit test was run on sample responses, Computational Table VI is located in the Appendix. The hypothesis of normality was rejected to a level of significance of 0.001 . Non parametric
statistics wero utilized for analys is of the parcat Opinionaire measurement.

Wilcoxon rest
A Wilcoxon Matched-Pairs Signed-Rank test was run on control and experiment means for the four sections and total test scores. (Table VII of Appendix.) The results showed an overall test difference favoring the experiment (Yak) group to a lovel of significance of .04 .

## Chi Square

Chi Square Contingency Table tests were rum on each test section. (Table VIII of Appendix.) Only the Attitude section showed any significance, (level of significance $=$ 0.0.), this difference was for numbers of scores exceeding 24 in that section.

YUÄ MODIFIED VERSION OF THE TENNESSEL SELF CONCEPT SCALE

In order to reveal gross trends or reactions of students to the Yuk Hodified version of the Tennessee self Concept Scale (YTSCS) and to increase the tractability of the material, raw data was recorded on Self Concept Tally Forms. in example of the first four questions of the scale charted for the ten respondents of the village of Kwethluk can be seen in Table IX which follows.

CABLE $1 X$ - lixcerpt of Self Concept l'ally foom for Village of Kwothluk


Responses from each student of each village were charted on an individual profile sheet. Fourteen scores of a person's regard for self are derived from the yrscs. They are: Self Criticist (sic), Total Positive Score (p), positive Identity (1), positive Self Satisfaction (2), positive Behayior (3), Physical Sclf (A), Moral-Ethical Self (B), Personal Solf (C), Family Self (D), Social Self (E), Total Variability or inconsistency ( $V_{\mathrm{T}}$ ), Variation within tne columns ( $\mathrm{V}_{\mathrm{C}}$ ), Variation with rows $\left(V_{R}\right)$, Distribution of responses (D).

These facets of image of self were computed and noted on the students' profile sheets, an example of which is located in the appendix, labeled Table X.

A sectional profile sheet was then developed on which all the students' scores from a village were transposed, providing four all-encompassing profiles, one for each village. Total, Mean, Percentile, Grand Total and Grand Mean tallies were procured from the raw data charted on these sectional profile forms. The sectional profile sheet for the village of Kwethluk is given on the following page. Similar composites were assembled for the villages of Nunapitchuk, Napaskiak and Napakiak.

Non Parametric Statistics
The use of the Student's $T$ or $F$ Analysis of Variance $F$ Test was rejected for evaluation of yTSCS differences. Both of these tests assume that the sampled populations are normal and this assumption seems tenuous because (1) the Yuk version of the test is unique and untested, (2) nine of the 100 question had to be deleted, and (3) it is questionable whether such an ethnic group in the midst of sociological change would exhibit normally distributed self concept characteristics.

A Chi Square Goodness of fit Test was conducted on the first two of the fourteen test categories to better evaluate this subjective rejection of normality. The results

TABIE XI - Sectional Profile Shoet for YTSCS
Eor Village of Kwethluk

showed the following:

Test
Section
SC
p

Moaning
Salf Crjticism
Total Positive

Reject Normality?
yos
.02
yes
.05

This would appear to verify our subjective rejection of parametric statistics for evaluation of the YTSCS.
'IABLE XII - Y'TSCS Means and Percentiles


A Wilcoxon Matched-Pairs-Signed-Rank Test was run on control and experiment percentile means for all fourteen test sections. The means for sections eleven through fourteen were made negative so that a lower score, (reflecting less variability), would compute as a positive difference. The results show a difference in favor of the experiment, or Yuk Educational Program Group, to a level of significance of . 03 .

Chi Square Contingency Table Tests
Investigation of individual data points in different test sections revealed a unique pattern whereby control group scores appeared to centralize within a narrow range of potential section scores, while treatment group responses appeared to concentrate below and above this range. Chi Square Contingency table Tests were conducted on each section to verify this pattern. Six of the fourteen tests showed significant results as shown below in Table XIII.

TABLE XIII - Significant Results from YTSCS Data

| Score | Significant Range | NUMBER OF OBSERVATIONS |  |  | Significance |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { Below } \\ & \text { Range } \end{aligned}$ | within Range | Above Range |  |
| SC | 22-29 | 4 | 13 | 24 | . 01 |
| $p$ | 276-315 | 8 | 25 | 8 | . 05 |
| Kow 1 | 95-107 | 13 | 14 | 14 | . 01 |
| Row 3 | 93-103 | 12 | 15 | 14 | . 001 |
| Col. A | 53-61 | 5 | 22 | 14 | .01 |
| Col. | 56-59 | 13 | 12 | 16 | .05 |

Conplete statistios for the chi square Contingency Tablo rests plus the ealculations of Goodness of fit and Wheoxon Matehed-pairs-Signed-kank are located in the Appendix, 'rable XIV (hrough rable XXI, for review. SRA ACHIEVEMBNT SERIBS, IEVEL 1-2, READING, FORMC

Rosults of the SRA Achievement Series, Levol l-2, Rendtng, Form C. (SRA), received from the villages were assembled intu four class Record rorms. Raw scores, grade equivalent scores and percentile scores in the five facets of reading tested by the sidn were recorded for each respondent from each village, Tables XXII, XXIII, XXIV and $X X V$, located in the Appendix, are copies of the Class Record Forms which resulted. The five reading skills tested were verbal-pictorial association, language percoption, comprehension, vocabulary and total reading.

Villuge mean scores by test section were then computed with the results shown in lable XXVI of the $A_{\text {ponder }}$ is.

## Parametric Statistins

in Matysis of Variance was conducted on four
factors:

| bactor | bescription | 6evel |
| :---: | :---: | :---: |
| A | fancurage | 2 (Yux, imalish) |
| 13 | 'yyus score | 2 (Raw, Poreontilo) |
| c | 'rost Sirction | ; Iverbal-pictorial, lancuage perception, comprehension, total roading, vocabulary) |
| $1)$ |  | 2 (routrol villages, (roatment villages) |

Complete comp utational results are in evidence in rable XXVII of the Appendix. The results are summarized below in Table XXVIIf,

TABLE XXVIII-Summary of ANOVA for SRA

| Variable | Difference | Significance |
| :---: | :---: | :---: |
| F®) | Between Villages | none |
| $\mathrm{F}_{\mathrm{A}}$ | Between Languages | . 001 |
| $\mathrm{F}_{\mathrm{B}}$ | Botween Type of Score | . 001* |
| $\mathrm{F}_{\mathrm{C}}$ | Between Test Sections | .001* |
| $\stackrel{F}{A B}$ | Interaction Languacge/ <br> Type Score | . 025 |
| FAC | Interaction language/ Test Section | none |
| $\mathrm{F}_{\mathrm{BC}}$ | Interaction lype score/ Test Section | .001* |
| $\mathrm{F}^{\mathrm{ABC}}$ | Interaction pype Score/ Tost Section/ Jancjuage | none |

Analysis of Variance results directly influenced threc conclusions: (1) that the English, or controㅇ group, performed significantly better than the Yok, or treatment group, on the test as a whole, (2) that the superiority of the English group was significantly more pronounced for pereentile than for raw scores, and (3) that there was not a significant difference in the relative superiority of the Enalish group between test sections. They were constant throughout.

Subsecquent Chi Square Contingency Table tests were run using Yate's Correction for Continuity. The test data is located in the Appendix for review, labeled Table XXIX through XXXII. The tests indicate that, despite the third conclusion above, there may be differences in the relative performance between test sections.

It must be pointed out, however, thore are some rules of thumb which guide a statistician's use of a eni square test that have direct bearing upon the present research. Noimally, the total number of observations should not be less than fifty, and there should be at least a frequency of five in each expected Erequency class. 85

While unless otherwise stated, the chi square tests used in this study meet the second condition, none meet the first considering the sample size is less than fifty. Therefore, the results displayed on page 60 , in iable BXXIII must be evaluated accordingly.

Despite the negative resnlts of the Analysis of Varjance Test, we are ied to believe that the superiority of the Engl ish over the Yuk groups on the SRA test is more promounced, as measured by the jrevalaned of higher scores, rather than average scores, on those soctions of the test

Brelark wa scinkads, statistical Mothods for Business
 ixaye $42 \%$.

TABLE XXXIII - Chi Square Significance within Test Sections for SRA

| Test Section | Type Score | Threshhold <br> Score** | Significance |
| :--- | :---: | :---: | :---: |
| language perception | percentile | $2 \%$ | 0.01 |
| language perception | raw score | 90 | 0.02 |
| vocabulary | percentile | 40 | 0.01 |
| vocabulary | raw score | 12 | 0.05 |

**Tests were run on numbers of students exceeding the threshiold score.
that measure Language perception and Vooabulary. Perhaps it is also meaningful that significant differences were not found in the Verbal-pictorial and Compretension sections of the test, neither in percentile nor raw scores. Supplementary Statistics

Because the requisites of number of obsarvations and cell frequency in the present study wore not fully satisfred, a Wilcoxon Matched-Pairs-Signed-Rank test was applied to the SRA data. The researcher's curiosity is admittedly the main reason non-parametric statistical analysis was pursued. The findings are not offered as venerable truths. It may be of interest, however, to note that, as Table XXIV on the following page displays, significance did still occur.
'INBIAK XXXIV- wilcoxon datchea-Pairs-Siyned-Rank 'lest for $\sin A$

| Test section | tinglish | Yuk | Di |
| :---: | :---: | :---: | :---: |
| 1 a | 50.6 | 6.1 | $+44.5$ |
| b | 54.4 | 10.3 | +44.1 |
| 2 a | 59.1 | 13.6 | $+45.5$ |
| b | 39.8 | 33.9 | $+5.9$ |
| 3 a | 35.5 | 15.3 | $+20.2$ |
| b | 53.0 | 15.2 | $+37.8$ |
| $4 a$ | 39.3 | 2.5 .2 | $+14.1$ |
| b | 67.4 | 29.3 | +38.1 |
| ja | 49.5 | 9.3 | +40.2 |
| b | 48.2 | 21.4 | $+26.8$ |
|  |  | Potal $=0$ |  |

$$
M_{\mathrm{T}}=\frac{10(10+1)}{4}=27.5
$$

$$
G_{\Gamma}=\sqrt{\frac{10(11)(21)}{24}}=9.8
$$

$$
\Rightarrow=\frac{\mathrm{i}-\mathrm{M}_{\mathrm{T}} \mathrm{~T}}{\mathrm{G} \Gamma}=0-27 . \overline{0}=-2.8
$$

Sianificant at $\alpha=.003$
I. SUMMARY, RESULTG AND RECOMMENDATIONS
Summary.

A unicule progran of instruction was deveioped for use in a fow village schools of the Kuskokuin district of Alaska. Instidution in this proyram was given in the Yuk iiskimo dialect, which is the indigenous language of the Kuskoknim area. Reading, math, social studies and other deademic materials wore translated into Yuk.
'rinis study was conducted to determine if there is any rolationship ootween the Yuk Educational Program of Instruction anc (1) the reading achievement of students who began school in september of 1970 and had been enrolled in the prograll for two and one half years, (2) the self coneept of students who began school in September of 1970 and had been onrolled in the program for two and one half years, arid (3) the rapport of the parents of those children with the school.
speeifically, subjects for this study consist of stucients in the village schools at Qwethluk, Napakiak and Nunapitchuk as well as their paronts. The population is Eurtior limited, as mentioned in the preceding paragraph, to students who first enrolled in school in Septomber, 1970.
rinc SRA nchiovomunt Series, lovel l-2, koading, form C, (SWN), onc of the thét instruments lased in this study,
 in 1965. It was designed to wvaluate pupils' basic
achievement in the broad curricula area of reading. It is the only instrument used in this research that was presented in English.

A second instrument, The Tennessee Self Concept Scale, was developed by Dr. William Fitts during the years 1955 through 1965. Fourteen subscores can be calculated from the responses to this test, all of which reflect the concept the subject has of himself. Modifications were made on this instrument in translating it into Yuk, and eliminating the need for subjects to have proficiency in reading. Directions and questions of the Yuk Modified Version of the Tennessee Self Concept Scale, (YTSCS), were read by examimers. Answor Booklets were developed containing picture, rather than word clues.

The parent opinionaire was the third measure taken in this study. It contains questions relating to the respondent's knowledge of the school, the frequency of his contacts with teachers and administrators, his attitude toward and general rapport with the school program. Developed specifically for this investigation, its purpose is to present trends of positive or negative reactions to the school program by paients of childron in tine progran.

Comparative data were collected from the instruments and subjected to statistical analysis as suitable for each test.

 Analy:sis or Vartamen on four factors of the tost, as woll



Non-phandertio statistios were selocted ds properi an fotin the Paront opinionatra and YqSCS manaros. dinl: durasion was condotand with time rojoction of nor-
 Fit tost. chi Squaru contingory Tables for oach sectoon ot both of hersu tests wore erompleted. A Wilooxon
 :ocet bont of the u'sises was obtaned. Parent opinionaire

 Flls omb for tion total tosit.
Rossults

Fine fanimat by the anvertigator ato listed bolow


1. Studunts in the Yuk liskime dialoct school profram have nore positive suli concepts than students in




Whe 1 radat oonal, or control ;roup, wio woro daught


tumded t.u be bimodal, outside this centralized range.
This soorthy in the excremes was computed as significant dt the .01 levol for Self Criticism, . 05 lovel for Total positive score, . 01 level for fositive fdentity, . 001 level for positive Bohavior, . Jl level for physical Solf, and .05 level for family Self.

Grablically illustrated, the groups' clustering might be projected as in the following sketch:

TABLA: XXXV - Histogram Illustrating bistribution of Scores on Y"TSCS


The monual for the rennessee Solf Concept Scale offers uxplanations of the nature and meaning of the part scores obtamed fron the test. Germane to this study are the descriptions presented for the six parts found to bo significantly supurior for the Yuk group over tine Englisin group.
A. Thre Self Criticism Section contains items that. are slightly derogatory. Most individuals admit that the majurity of tio statements are true for them. Denying most of the statements wouli indicate defensjveness. Extreme agrement witn the items would suggest the possibility that the respondec is pathologically undefended. High scores asuall $\because$ ary maicative of a noalthy, self-oritacal attitude.
3. Fine loonl rositive Sextion is tho most important
 dence and prasons who regard themselves as having value and worth.
(. In the 'ositive Identaty Section the respondee presents a pieture of has basic identity, or how he soes himself by reacting to the itoms presented.
D. 'line Positive Behavjor Score roflects an indiviGual's そucoption of how he berforms and functions.

Fi. 'rins physicul Self Suction contains items dusuribing physicul appedramet, health and skills. An indivialual's petcoption of these attributes in himself is shown in this score.

ש. Fmally, the Family Self Section involves the individual's viow of self in roference to his most imnediato eircle of associatos. Ithe deyree to which one rucoonizes his adoquacy and worth as a family member is dsourtained by a tally of the subject's responses to items in this scotjon.

II, Students in traditional Eskimo school programs, learning through English, are significantly better in languege perception and vocabulary.
'he SRA bestimy instrument used in this study to abobess fucility in reading and vocabulary was presonted entarel; in Englisin the sRA test is structured to
 Rodiors. 16 sumstions are quared to assess the language
tenhmodues stressed in the Hasal English Reader Format. It is beyond tas point of cavil therefore, that those students who had been instructed in, adad bombarded with English in thear daly sehool program were destined to fair better on the SRA tost than those instructed in Yuk and exposed to English for but one hour's lesson each day.

To ascertain the true reading proficiency of the Yuk studentss it would be nocossary to develop an instrument when rolates to the vocabulary and skills taught in their text -- in other words, a Yuk test.

The SRA might appear to be an unwise choice of measure considering the inherent language handicap of the tested groups. The decision to use the $S R A$ was weighted by the knowledge that the Yuk students were receiving instruction in the finglish language for an hour each day and, more important, that they will eventually be expected to read English texts if they contjnue their education in American Public Schools.

The control grouus' higher score at this point of their fohooling was expected. Jt. may be that the more positive self concopt displayed by the tuk group will favorably $\therefore$ ffoct their rate of learning. Attention should be given to corparing the groups after several more yoars of achoollna and whea both are involved in Finglish texts


 1.: : i: than.
III. Parerts of students in the Yuk Eskimo Dialect school program have more positive attitudes toward the schooi than parents of students in traditional Eskimo school programs.

If one endorses the belidef that a learner's home environment direetly effects the learner's school achievement, finding number three of the present study would be considered crucial to educators of Eskimo children. Toaching in the student's native language increases supportive attitudes from the home. If suppertive attitudes from the home foster academic advancement, it would seem wise to restructure Eskimo school programs to allow for instruction through the mother tongue. Programs such as the Yuk Eskimo Dialect one should be the rule, not the exception.

Recommendat jons

1. Apparent from findings in this study is that students learning through their own netural mode of language in Eskimo communities have more positive attitudes of self. What may be implied from the skew, or bimodal, pattern of the results is that these children also develop more individualistically.
fn inverse assumption might be drawn from the scores of the children that were learning through English in the control group. 'ine elustering of their scores in the mid-rande tompts the soncluston that these students develop a sameness, or uniformity of response. Varied, unique
responsos did not pravail for schools teaching through English in thiss study.

Vexing questions come to mind. Does learning through English foster conformity in pupils? Does conformity dovidop in students learning througin any language different from their own?

Further investigation of the score-clustering phenomenon would be of value to educators. If graduating students with diverse, unique reactions is a goal of the American schocl system, discovering what methods of program nourish this dovelopment is cogent to edtcational planning.
2. In February, 1974, during the Alaska State Leqislature's session in Juneau, Senator John Sackett sponsored a proposed constitutional amendment providing that. Alaskans in Alaskan schools be taught in their native tompac. 'The present studies' results support the advisability of the yassage of this bill if the desire is for native cinildren to develop more positive self concepts and to have thoir parents regard schools in a more favorable light.

Tine amendment was not brought to a vote this year. in informal consus of the legislators' opinions suggests that the amendmont will meet with approval when voted on in the next session.

Native students of Nlaska may, therefore, profit from the findinas of this study, However, more than three million American school thildren come from non-ling lish spenking homus. Fesults from tho present research are germane to
oducational programs for luerto Rican, Chinese, Navaho and all other students whose mother tongue is not the national language. fhe effects of traditional English curriculuns upon these youngsters and their parents should now be questioned. further investigation, similar in nature to this researci, is needed for schools across the nation serving clients from bilingual homes.
3. Much data gathered in this study was not diroctly subjectod to analysis. the goals of assessing student achievement, student self concept and parerit-school rapport were the sole interest of this report. Information On the parents' ages, yearly incomes, highest grades completed in school, how the parents are presently employed. and the number of siblings in the families, now available through this research, could provide a resource for future researchers. Attention should be given to cross-relating this data to other demographic or sociological factors.

APYENDIX

ERIC

# SRA ACHIEVEMENT SERIES 

## Examiner Manual 1-2 Form C


prepared by Louis P. Thorpe, D. Welty Letever, and Robert A. Nasland, oll of the University of Southern California

## CIRA

Science Research Assoriater. Inc. 259 East Eric Street, Chicago. Illinois G0611

The person who will administer this test battery should plan to study this manual twice-once for timiliarity with the testing procedures, and once to see how answers are recorded in the test booklets. If possible, the examiner should take the tests himself before administering them.

## Nature and Purpose of the 'lest Rattery

The basic function of the SRA Achievement Series 1.2 is to measure pupils' basic achievement in two broad curricular areas-reading and arithmeic. Following is an outline of the battery.

1. Reading (What is this about?)
A. Verbal-Pictorial Association
2. Word-Pieture Association
3. Phrase. Picture Association
4. Sentence-Picture Association
B. Language Perception
5. Auditory Discrimination
6. Visual Discrimination
7. Sight Vucabulary
C. Compreliension
D. Vocabulary

Il. Arithmetic (Let's figure this out!)
A. Concepts
B. Reasoning (Problem Solving)
C. Computation

Materials Needed
There are no separate answer sheets for the tests. The pupils mark their answers in the test booklets.

Reading test booklet. One copy for each pupil. The examiner should have an additional copy for demonstration.

Arithmetic test booklet. One copy for each pupil. The examiner should have an additional copy for demonstration.

Pencils and erasers. Two soft lead pencils and an eraser for each pupil. Have an adequate supply of extra pencils on hand.

Scratch paper. Each pupil will need at least one sheet of scratch paper for the last session of the Arithmetic test.

Examiner manual. One copy for the examiner.

Timer. The test periods must be timed preeisely. An interval timer is best for this purpose, although a stopwatch or watch with a second hand will do.

Reading materials. Study materials or books of general imerest should be available for pupils who finish early in a given testing session.

## The Testing lioom

The testing room should be quiet, well lighted, and well ventilated. If possible, arRIC to test in a room that does not face a
playground. Make preparations in advance to reduce recess noises and to keep messengers from entering the testing room.

Arrange for desk or table space so that each pupil has room for an open booklet and, for the Arithmetic test, scratch paper.

## Scheduling the Tests

The total time needed for the two tests is approximately five and one half hours, four of which are actual testing time. Table 1 contains a suggested schedule for the administration of the tests. The "Total Time Needed" column indicates the approximate units of time needed for distributing materials, reading directions, testing, and rest periods.


Head alohed
Open your booklet to page 8 . Fold the book. let so that only page 8 shows - like this.

Hold up paser 8 for all to sere.
Dhas two boxtes on the blachboatel, onte under the other. and write " sathe" atter the first and thllement adter the second.
Read alower
Now listen to the directions for page 8. . . 1 am going to say some words, two at a time. listen carefully to the beginning sounds, not the spelling, of each pair of words. If the two words begin with the same sound, put an $X$ in the box in front of "same."
Demonstrate uning the boxes gou have drawn on the blachboard

If the two words begin with different sounds, put an $X$ in the box in front of "different."

Demonstrate, usine the boxes you have drawn on the blackbormd

Here is an example of what you are to do. Listen to these two words: . . . bat - bag. 'Poust.'. Do they have the same or different beginning sounds? . . Since the beginning sounds are the same, an X has already been marked in the box in front of "same" after question $A$.
liold un page 8 and point to the marked box.
Now listen to these two words and mark an X in one of the boxes after question B: . . bill-hill. 'Pumse': You should have put an $X$ in the box in front of "different," because the beginning sounds are different.
Check to see that each ptopil has made atr X in the proper bow.

After you mark each answer, hold up your pencil so that I can see you are ready to listen to the next pair of words. I will say the words only once, and then allow enough tine for you to mark an X in your booklet. So that each of your answers will be in the right place, I will call out the question number before 1 say the pair of words.
Remember, if the two words in each pair have the same beginning sound, put an X in the box in front of "same." If the two words have a different beginning sound, put an $X$ in the box in front of "different." Are there any questions? . . . Now hold up your pencil and listen.

Read edell word in a lond. clear voice. Be sure that the answers are being recorded in the right nilaces. Proceed at class speed.

Beginning Sounds-Test Booklet Paцe S

1. see-seen
2. ate-eighty
3. string - strand
4. ball-call
5. wee-wean
6. slink-blink
7. screw-scream
(Fnd first columm)
8. twin-twist
9. from-frown
10. bad-dad
11. man-Nan
12. sea-zebra
13. have-hat
14. kick - quick
15. true-tree
16. bray - gray
(End second colennm)
17. nap-map
18. glow-glue
19. prim-brim
20. few-view
21. awning-owning
22. crystal-gristle
23. etch-itch
24. tree-three
25. streak-shriek
(End last columm)
This completes the testing session. Colleet all lest booklets.





 Mder

Hered ablud:
Open your booklet to page 14. Fold the book. let so that only page 14 shows-like this. Hold uppater 14 for all torse

Today you are going to read some stories. After each story there are some questions. Yon are to read the story first and "len answer the qucstions. ..
Look at the story on page 14. Read it to yourselves while I read it aloud.

## Our Garden

We have a garden at school.
We planted one row of corn.
We raised many plants that have flowers. We worked hard.

Now let's read question A.
The garden was at
a. school
b. home
c. the farm
d. the house


Where was the garden? ... Yes, it was at school. So that you will know how to mark your answers, all $X$ has already been put in the box in front of the word "school."
 (1tin) !
lis.en otericl
Look at question B. It says:
The children planted only one row of
a. flowers
b. beans
c. beets
d. com

What did the children plant only one row of? . . Yes, they planted only one row of corit. Put an $X$ in the box in front of the word "corn."

Inamontrate on the blackband reprodnction of question lis.

Now look at question C. It says:
Did the children work hard?
a. Yes.
b. No.
e. We can't tell.

Does the story tell us that the children worked hard? .. Yes, it does. Put an X in the box in front of the first answer.


Re.ad adould
Open your booklet to pages 28 and 29. Keep the booklet open so that both pages show like this.

Answer the questions after each story. Keep working until I say. "Stop" or until you come to the words "Stop Here" at the botiom of
24 What Tho These Words Mean?

## A Trip [howslown

The fits: grade went to the post office.

A postmian wid the'm about his Hirk

They saw how letters are malled.
They saw how poople buy stamps
They watches the manl trucks come and go
When they went back to school, they
wrote a stary
page 31. When you have finished, put your pencil down, close your booklet, and wait quietly, Are there any questions? . . . Begin.

## 


 hawhle:

| 1. In this story first means a. last b. beginning <br> c. highest d best <br> 2 In this story work means a what a man does b sompthing very hard c. something that is fun d what a man says <br> 3. In this story letters means a something sent b. something prinked c. sonething camied d. something read <br> 4. In this etory malled means a found by the postman b. written to the post office c sent to the postman <br> [ $\mathrm{A} d$ put through the post offe <br> 5 [n this story buy means a. 6 ind $\square$ b. lose $\square$ c pay for $\square$ d sell <br> 6. In this story walched means a. washed b. heard $\square$ c hatched <br> a <br> d. looked at <br> 7. In this blory Lrucks means a wagons b trein tracke c. big cara $\square$ d. carries <br> B. In this story sehool means a. a place to play b. a place to learn c. to teach momeone d. to scold someane Go On_m |  |
| :---: | :---: |
|  |  |

25 What to These Wonds Mean?

The Gardin
Bill and Susan have a garden.
Father gave them money for seeds Susan got some flower secds
Bill ubnted to grow sorne corn
Most of the seerd $\frac{\text { grew }}{4}$ inso tall
plants.
Bull and Susan worked hard in thesr garden.

Allow exactly 1 is minutes for pates $28-31$.
Reard aloud

## Stop! Put your pencil down and close your booklet.

This completer the testing session and the entire Reading test. Collect all test booklets.




Specific directions for scoring each test and recording the scores are found under "Directions for Using the Scoring Chart" or the inside back cover of each test booklet.

## Reduced Test-Howh I'ages

Scoring keys in the form of reduced testbook pages are included in this manual with the directions for administering the tests. On these keys the correct answers are minked in bluc: answers to simple items - not to be scored - are marked it black.

Strip Kics
Strip keys, provided as ati alternative method of scoring the Language l'erception sul)test, are inchoded in the back of this manual. On these keys the correct answers are marked with black X's: sample items have been omitted. Fiach column of the key corresponds to a cohamn of questions in the test book.

To use the strip keys, detach them from the manual and fold them along the vertical lines marked "Fold back here." Place the open key for pages $8-9$ to the left of the first colnmon onge 8 of the pupil's booklet and check the correct responses. Fold the first column of the key under, move to the second column on the testbook page, and score that column. Continue in this way until the two facing pages have been scored. Connt the mimber of correct answers on page 8 and record the number on the scoring chart. Then count the correet answers on page 9 and record that number on the chart. Use the keys for pages 10-11 and 12-13 in the same way.

## Marked fest Booklet

Some teachers prefer to score the test by using inaster test booklets that they have marked with the correct answers. A master booklet can be prepared by transferring the correct answers from the reduced pages to an unused test booklet.

Ourlay lieys
A complete set of overlay keys is available for scoring each form of the $1-2$ battery. A separate overlay is provided for each page to be scored. Before using any of the overlays, arrange them in consecutive order by test according to the number in the colored circle at the lower right-hand side of each key. The overlays for the Reading test are numbered 1 to 23; those for the Arithnetic test, 1 to 12.

The Verbal-Pictorial Association keys are transparent overlays on which lines have been printed to show which picture each word or phrase in the test deseribes. Align each overlay so that the stars on the key coincide with those ori the page. Compare the lines on the key with those the pupil has drawn, ehecking whether the word or phrase has been connected with the proper picture. Lines do not have to be straight or lead from star to star. Record the nuinber of correct responses for each page or the scoring chart, checking to see that it does nol exceed the maximum score for that page.

The overlays for all subtests other than Verbal-Pictorial Association are stencils with holes punched in the positions of the answers. Before using the stencils, scan each page of the test book for questions to which the pupil has marked more than one answer. Draw a horizomal red lire through all possible answers to such questions so that these questions will not be scored. (Note: For item J on page 4 of the Arithmetic test, the pupil should have marked more than one answer.)

Align each stencil so that the page number in the test book appears directly below the matching number on the stencil. Count the number of correct answers on the page and record this score on the scoring ehart, checking to see that it does not exceed the maximum score for that page.



| $\begin{aligned} & \text { RAW } \\ & \text { SCORE } \end{aligned}$ | grade Equiva. LEN1 | PERCENTICE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Grade I |  | Grade 2 |  |
|  |  | End | Beg. | Mid | End |
| 39 | $4+$ | 99 | 99 | 99 | 99 |
| 38 | $4+$ | 99 | 99 | 99 | 99 |
| 37 | $4+$ | 99 | 99 | 99 | 99 |
| 36 | $4+$ | 99 | 99 | 99 | 99 |
| 35 | $4+$ | 99 | 99 | 98 | 98 |
| 34 | $4+$ | 99 | 99 | 97 | 96 |
| 33 | $4+$ | 99 | 99 | 96 | 94 |
| 32 | $4+$ | 99 | 99 | 95 | 92 |
| 31 | $4+$ | 99 | 98 | 93 | 89 |
| 30 | $4+$ | 99 | 97 | 91 | 85 |
| 29 | $4+$ | 99 | 96 | 89 | 81 |
| 28 | 3.7 | 99 | 94 | 85 | 77 |
| 27 | 3.5 | 98 | 92 | 82 | 72 |
| 26 | 3.3 | 97 | 90 | 78 | 67 |
| 25 | 3.2 | 96 | 89 | 77 | 64 |
| 24 | $3 \cdot 1$ | 95 | 87 | 74 | 61 |
| 23 | 2.9 | 94 | 85 | 71 | 58 |
| 22 | 2-8 | 93 | 82 | 68 | 54 |
| 21 | 2.8 | 93 | 82 | 68 | 54 |
| 20 | 2.7 | 91 | 78 | 64 | 49 |
| - 19 | 2-7 | 91 | 78 | 64 | 49 |
| - 18 | 2.6 | 88 | 73 | 59 | 45 |
| 17 | 2.6 | 88 | 73 | 59 | 45 |
| ' 16 | 2.5 | 85 | 68 | 54 | 41 |
| 15 | 2.4 | 81 | 63 | 50 | 37 |
| 14 | 2.4 | 81 | 63 | 50 | 37 |
| 13 | $2 \cdot 3$ | 76 | 58 | 45 | 33 |
| - 12 | 2.2 | 70 | 52 | 40 | 29 |
| 11 | $2 \cdot 1$ | 64 | 46 | 35 | 25 |
| 10 | 1.9 | 58 | 40 | 30 | 21 |
| - 9 | 1.7 | 46 | 30 |  | 15 |
| 8 | 1.4 | 32 | 17 | 13 | 08 |
| 7 | $1 \cdot 1$ | 20 | 10 | 07 | 04 |
| 6 | 1. | 14 | 06 | 04 | 03 |
| 5 | $1-$ | 09 | 03 | 02 | 02 |
| 4 | $1-$ | - 05 | 01 | 01 | 01 |
| 3 | 1- | 02 | 01 | 01 | 01 |
| 2 1 | $1-$ | 01 | 01 | 01 | 01 |
| 1 | 1 - | 01 | 01 | 01 | 01 |


| $\begin{aligned} & \text { RAW } \\ & \text { SCORE } \end{aligned}$ | GRADE <br> EQUIVA <br> LENT | PERCENTILE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Grade | Gfade 2 |  |  |
|  |  | End | Beg. | Mid. | End |
| $235-248$ | $4+$ | 99 | 99 | 99 | 99 |
| 234 | $4+$ | 99 | 99 | 99 | 98 |
| 233 | $4+$ | 99 | 99 | 99 | 98 |
| 232 | $4+$ | 99 | 99 | 99 | 98 |
| 231 | $4+$ | 99 | 99 | 98 | 98 |
| 230 | $4+$ | 99 | 99 | 98 | 97 |
| 229 | $4+$ | 99 | 99 | 98 | 97 |
| 228 | $4+$ | 99 | 99 | 98 | 96 |
| 227 | $4+$ | 99 | 99 | 97 | 9 |
| 226 | $4+$ | 99 | 99 | 97 | 95 |
| 225 | $4+$ | 99 | 99 | 97 | 94 |
| 224 | $4+$ | 99 | 99 | 96 | 94 |
| 223 | $4+$ | 99 | 99 | 96 | 93 |
| 222 | $4+$ | 99 | 99 | 96 | 92 |
| 221 | $4+$ | 99 | 99 | 95 | 92 |
| 220 | 4+ | 99 | 99 | 95 | 91 |
| 219 | $4+$ | 99 | 99 | 95 | 90 |
| 218 | $4+$ | 99 | 99 | 94 | 89 |
| 217 | $4+$ | 99 | 98 | 93 | 88 |
| 216 | $4+$ | 99 | 98 | 93 | 87 |
| 215 | $4+$ | 99 | 98 | 92 | 86 |
| 214 | 4+ | 99 | 97 | 91 | 85 |
| 213 | $4+$ | 99 | 97 | 91 | 84 |
| 211.212 | 3.9 | 99 | 97 | 90 | 82 |
| 209.210 | 3.8 | 99 | 96 | 88 | 81 |
| 207.208 | 3.7 | 99 | 95 | 87 | 78 |
| 205.206 | 3.6 | 99 | 94 | 85 | 76 |
| 202-204 | 3-5 | 98 | 93 | 83 | 74 |
| 199-201 | 3.4 | 98 | 92 | 81 | 71 |
| 196-198 | 3-3 | 97 | 91 | 79 | 68 |
| 192-195 | 3.2 | 97 | 89 | 77 | 64 |
| 188-191 | 3-1 | 96 | 87 | 74 | 61 |
| 183-187 | 2.9 | 94 | 84 | 71 | 57 |
| 178.182 | 2-8 | 92 | 81 | 67 | 54 |
| 172-177 | 2-7 | 90 | 78 | 64 | 50 |
| 166-171 | 2-6 | 87 | 74 | 60 | 46 |
| 160.165. | $2 \cdot 5$ | 83 | 70 | 56 | 41 |
| 154-159 | 2.4 | 79 | 65 | 51 | 37 |
| 148.153 | $2 \cdot 3$ | 74 | 59 | 46 | 32 |
| 143-147 | 2-2 | 69 | 53 | 41 | 28 |
| 138.142 | 2-1 | 64 | 47 | 36 | 24 |
| 133-137 | 1.9 | 58 | 41 | 31 | 20 |
| 128-132 | 1-8 | 53 | 35 | 26 | 17 |
| 123-127 | 1-7 | 48 | 29 | 21 | 14 |
| 117-122 | 1.6 | 42 | 24 | 18 | 11 |
| 112-116 | 1.5 | 36 | 19 | 14 | 09 |
| 107-111 | 1.4 | 31 | 15 | 11 | 07 |
| 102.106 | $1 \cdot 3$ | 26 | 12 | 09 | 05 |
| 97-101 | 1.2 | 21 | 09 | 06 | 04 |
| 92.96 | $1 \cdot 1$ | 17 | 06 | 04 | 03 |
| 91 | 1 - | 15 | 04 | 03 | 02 |
| 90 | $1-$ | 14 | 04 | 03 | 02 |
| 88.89 | 1- | 13 | 04 | 03 | 02 |
| 87 | $1-$ | 12 | 03 | 02 | 02 |
| 85.86 | 1 - | 11 | 03 | 02 | 02 |
| 83.84 | 1 - | 10 | 03 | 02 | 02 |
| 81.82 | $1-$ | 09 | 02 | 02 | 01 |
| 79.80 | 1 - | 08 | 02 | 02 | 01 |
| 76.78 | $1-$ | 07 | 02 | 02 | 01 |
| 74.75 | 1 - | 06 | 01 | 01 | $0!$ |
| 70.73 | 1- | 05 | 01 | 01 | 01 |
| 66-69 | 1 - | 04 | 01 | 01 | 01 |
| 62.65 | $1-$ | 03 | 01 | 01 | 01 |
| 55-61 | 1 - | 02 | 01 | 01 | 01 |
| 1.54 | 1 - | 01 | 01 | 01 | 01 |
|  |  |  |  |  |  |

# TENNESSEE （Departrent of Kental Health） SELFCONCEPTSCALE 

HILLIAY by，FITTS，EnD．

Fublished by
Courselor Recordints and Tests
$B 0 \% 6: 84$ \＆とkien Stミむion

Nashville，Tennessee

YUK TRANSLASED MODIFIED VEASION

Pascal Afican by Judith S．Harkins

ERIC


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    WILETO: %. \TMN: एnD.
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YUK riminseated nodified veasion

Pasoal arcan Gind Judith S. Harkina

## Trsmanneos

No training is necessaiy to be able to give the TSCS(Translated Version) Lo students. It is sussested tha: prior to testing you read at least throush vase one to familiazize yourself with the procedure. You need not correct cine tesis wen the stujents have completed them. Simply package asi of the Airswe: Sicees and the Instruction Booklet and mail tos Judith S. Esisistrs, $: 256$ Nect:ood Court, Anchorage, Alaska 99504.

Givo each chisd an arsier Booklet and pencil. Help the children complete the persoral fanomation boxes at the top of page 1 of the booklet.

Say to cine ciaziona, "i an going to read things about you. Listen as
 a:3 put an ' $\because$ ' in the ciant place. Please answer as if you were describing yourself to yoursalf. Wo'll practice making 'X's' first. Then we'll talk EDout we :ive isiads of answers." (zut an ' $X$ ' on the blackboard. Let one or two childien so to the boaid and practice waking an ' $X$ ').
"Let's talk about the flive answers. Do you see the very happy face? You will use that face when your answer is 'completely true'. Now, put you: ifnce: on ti:a face rext to 'coapletely true'." (check to see if the childran have the correct facel. "that face means, 'wostly true'. Now, put your fincer on the face $n 1$ th no eyes or mouth. The face has no eycs or mouth because it doesn't know whether to say true or false. Use thic Sace to answo: 'gartly true and paitly false'. Put your finger on the face with the sad eyes and routh. Use this face to answer, 'mostly false'. We have one more face left to talk about. Put your finger
on it, Fhis is fie face with the very sac ejes ani vory sad routh. :ie wlll use this face if we want to anser, 'coroletely false',

 this cursticn as if yan were icecrictag zourse? f. iore is the staterant.

 oi the very happy iate. If you sre a oirl, you :illl hote to answer
 the ficutre of the very sud sice. $\because n$ ons w!? dani is anser irostly
 are all corpletely boys or norpletely not boys. Put yeir nencils don and I nill come and see how woll you are dolng." (Cheok the chition's work).
B. Let's try anothse çustien, this tire se lill pit our IV's' on the same line as the picutre of the bosi, inre is the statorent. I cosro. Put an $1 \%$ on the sam 1 ine as the ninture of the pex unger the picture of the face that is best to cescribe you. If you nover, -ever co:sh you



 the face that reons partiy trie an! :arty falzel. Thatre ine ene in

$\because 2 r a n s e c$ Self－Concept Scale
 antructions page 3
do，you h：$:$ ：put an＇$x$ ：unde：the zace that means＇rostly true＇．Probably nobody put an＇X＇under the last face，＇completely true＇，because that would rean that you cousia and couch and cough all the time．

Put your pencils down ani let miz see what you thints about yourself and how mich you cough，＂（Checis the chileren＇s work to be sure they are proceeding as expected．You may discuss a child＇s answers inth him at this point to be suse he responis＇to future statements as he rendly in－ tends to．These first two lines have been included to insure youngsters understand the mathod）．
解 5 sealtioy boty．Put your＇ X ＇under the picture that means＇completely falsz＇，＇mustiy salse＇，＇fartly true and partly falsel，＇rostiy true＇，or ＇completery true＇．

3．Co to the line with the picture of the tree．Keady？I an an attrac－
 yourse゙天。

5．Go to the line with the rasbit．I consider myself a sloppy person．
29．Go to cire line inth the pictuce of a ball．Ready？I am a decent sotit gix pernor

21．How you shoula ie on the line with the picture of a slec．I am an honest person．

37．Go to the line with the picture of a gin I am a cheerful perron．
39．Go to the line with the yo－yo．I am a caln and easy noing person．

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Man=ss=s Eecf-Cucept Scale
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    20544
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5. Go to the line $:$ ith the picture of a panc:1. It's the last picture on this


关 cis puccuitito the uotect page, the cowect line and are answering with


号
6. Co to the


7\%. Go to the 1 thu witit the picture o: a ciair. $i$ an not interested in what yher gosic co.
7. Co to tiae asi: witi the picturo of an artow. I do not always tell the truth.

8. Go to the line with the book. I like to look nice and neat all the time.
9. Lin, the 1 ine hith the scissors. I am ofll of anes and pains.
10. Go to the line with the pictire of the comb. I an a religious person.

```
\because..: \becausenc: nusd 囯i:'cd Vervion
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                                    5
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38. "Go to tha line with the slag. I have a lot of self-control.
39. Your next ' $X$ ' goes on the same line as the cat. I am a hateful person.





40. The inse with the cigareote. I an mac at the whole wortd.

 - 目:


The pleture on the firit line of the next page is mountains. I wlll read a statement and you wili pit an ix undey tita wise that is best for you. One face means 'completely






41. The naxi line ias a pieturs of a fisiz. We had a picture of a fish before. Zantis ast ricit. Scre of ti.e plotures bave been used roce thin one time. Put your anwer an the istar with this fish. I gutch to go to chach more.
42. Hou the i:se wivi the wo:n. $x$ an setsisca to be just what I amo


 65．The iicitbuld is on the lasi line on this page．Put an＇X＇where you think it Eelongs on the last ilne wier the best face for you．I should trust my family $: 0: 3$.



79．I ar ax ccatiole as I uant to be．

03．Nit line with the telemone．It am good at all from a social standpoint．

S7．：xa lis：2 witiz the zishinook．Once in a while，I laugh at a dinty joke．
6．You cinuti $D e$ on the line with the hite．I an nelther too tall or too short．





六艺。
15．A＇an the paje ard put an $1 X$＇on the line with the picture of a knife under the ace that is best for you．Here is the statement．I am not the person I would like to be．

48．Now the line with the arrow．I wish I didn＇t give up as easily as I de．
The line with the bow．I treat $\underset{\sim}{2}$ parents as well as $I$ should．（＂Treated，＂ they are not living）．

65．We＇re on the line Wiwh the Dotilc．I should love my famlly more．



$\therefore$ 为






必
33．Fix 1 tie with che pencil．I try to change when I knou Itm doing things that an wor



## 5 以



；3．Tine 1 the ：ith cis cariice I co things withcut thinking about them first．

69．Tu ane up to the stor．I teice a mex interest in fy family．



$$
\begin{aligned}
& \text { تewaisec S:A-Concept Saalc }
\end{aligned}
$$

$$
\begin{aligned}
& \text { 运 } 8
\end{aligned}
$$

 of vicu．















72．Co to ti．2 lian witin the airplane．I do not act like family thinks $I$ should．
W．The inie with the mukluks．I sce good points in all the people I meet．
8介．Go to tine stove 1 ine．I co not feil at ease with other people．
So．Liou the 1 ine with the girl＇s hair．I find it hard to talk with strangers．
100．The last lire has a picture of a parica．Ready？Once in a while I put off until tomorcs what I ourht to do today．

NMM.NSOM-M
(Uayuaw Pengegnailutiinek Calistent)

## ELLMEGGNEX TANGLIERMENG CUQYLTIIY

pidiaqescid
Williän ${ }^{\circ}$. Fitts, PMD.

# Iotutestift <br> Counselor Recoidings and Tests <br> Box 61664 - Ackien Siaiion Nasnvilie, Tennessee 37212 

<br>RAschà: dícan - Judich garkins




getuzestift: Counseior Ra vidings and Tests, Jox 6184, Ackien Station, Nashville, Tennessee

YUGTUN RMMIGTESTII CTMTCUAQERTII-LLU
pasciàl L. Af́can-áq juith S. Hárkins-aq-1lu

## ALEXQUTET


 rirlưi. Xituzenargenritut kaiskat naspaallrom kinguaxun, katurrluki taugaam apqaurutet alezquatet-ilu caquatnun ekluki tiyuqiuki uumun:

Jucith S. Harikins, 1250 Redwood Court, Anchorage, Alas'ka 99504
Ciki:luki mikelngult tamalkuita kícinek kāikanek igarcuutnek-llu. Ikayurnarqut wikelnguit fuirijlratni ciuqliznek quilirnek ciuqlirmi mumigtaami.

Mikelnzuut piluki waten, "Nąqiqatartua gyuqucizieconek, Nifcugnikiciki cat tamaica naaqeilrenka, Tua-llu cucukiciquci ililtnek taukut talliman kiucit X-aaliriuku1lu diluariluni kiuciq. Xiugaqluci pikici elpecenck qaiarutkellriatun elpecenun. Ciumek X-aalinermek naspaacicukut. uá-ilu qaiarcíqukut taukune.: tallimanek kiucinek." (X-aaliluten igarviguis, ziait tuarliu mikelngutt igarvigaun pivkarluki naspaavkariuki X-aalinerwek).
"Qaiarteita tual ixunck tallimanek kiucinek. Tangrrarci-qaa angniqapigtelria kegzinacuar? Taura aturazkiqeaci kíntuci piciuqapigeek. Tua-ilu caniqlia nifqerciu." (Raqluki wikelnguvt elluatuq kezginaq nataçeilratnek). "Tauna kagginaq qanertuq piciurpallusaílíu, Tua-ilu aiaam nirciu kegbinacuar ingilnguq qanrilnguq-ilu. Tauna ilngituq qanrunani-ilu nall vámiu piciullra wall'u piciuntitellra cam piciatun. Una kegíinacuar atuqiciu kiukuvei ilif piciuniluxu ilif-llu piciuvenani, Nifgerciu kegginacuar angniflnguq, Una atuqiciu kiukuvci piciunriterpallumiluku. dtauciurtuq kegginaq piksailkeput. Nifcerciu. Una kegginacuaq angniftqapiartuq. Una aturciqerput kivkumta piciunritgapigni-
A.

Naspaalta apyutet ilaitnek. Ciuqliq kiueiq candy cane-alegmun cetermun elliciqaput. Una kiukiciu elpecicenek qalaruckeilriatun. Waniwa ciuqiiq kilugarkarci. Tanegurraugua, Tua-1lu tanegurraat tamarmang angniqapigteliriim aciani candy cane-am cetrani X-aaliluteng. Neviarcat tararmeng angniftqapiaralrifa aciani candy caneraam cetrani X-aaliciqut. Kiugarkaunritarci piciunriterpallurniluku, piciunriterriugniluku picurrlugluku1lu dall'u piciurpailurniluku tãarpeci neviarcaungavci. wall'u tanegurrauluci. Igarcuuteci elliciki qzillun kiuici paqetnauranka." (Paqtaarluki mikelnguut kiuciit). 3.
 Wuniwa kiugarkarci. Quslarcua. X-aalici yazssifcuaraam cetrani kegsinacuaraam aciani eipeci picisyaraifecetun. Qusyuitqepiarquvei X-aaifrcicaci piciunricqapiim aciani.
 kegsinacuairaam angaifterilulriim aciani piciunriterpallurniluku. Pitalgeggluci qus1:quvei X-aaliciquci kegginacuaraam aciani ingilngum qanrilnguum-11u aciani ilif piciunclugniluku ilif-1lu piciurriunrieniluku. Tauna qukaqliuguq-qaa? Yuut ilaieni
 pallurniluku. Kesiaçapiar qusetiuralanrilanta taqeksanata ilame kiungaitukut taum kegginacuaraan aciani piciuqapigriluku.
"İarcuuteci elliciki paqetnaurqa qai:i.n: kíullerpecenek quslalierci pitekiuki". (?aciuki mikelngutt taitikuita zuaten piarkauciactun patassiarluki. Mikelnguut ilait taringenilinguut nalqigutenqegcarluki allanek pikata alarteksaunaki piarkaurrluki umyuameng piyugtaciatun. L'kuk malruk ciumek piagput taringenqegcaasqelluku mikelngurnun qaill' piller'kaatnek).

1. "Uumiku kiucirput alifatek (aliumatek) cetragniun elliciqaput kégginacuaraat aciftnun. Tua-qaa? Qaika naullutyukaranrituq, X-aalici tarenracuaraam aciani piciunritq̧pisgniluku, piciunriterpcilurnilwiu, piciun:iterriugniluku piciurrlugluku-ilu, piciurpailurniiwku wall'u piciugapiganiluku.
2. Tua-1iu cetermun ncpartalegmun pici. Tu-qaa? Kenegnartua, Nalluyagucaquaciu elpecenek alpacenun qalarutkeliofacun kiullerkarci.

3. Cetermun angqertileguun pici. Tua-qaa? Assirpallulriaruunga.

2i. Cetezann nutâa dikamacua:talegaun ellirtucs. Iqluquyutua.
37. Nutegralegran ceteruin pici. Angnirturalartua.

39: Yo-yo-ertalegmun pici cetermun. Cacassuraralriarunitua.
55. Cetermun igarcuutetalegmun pici. Nangneqliuguq uumi mumgtaami. Tua-qaa?

Ilengqertua 1kayurviainartekamnek camek plofatun areciallugeskuma.
57. Ataucimek mu*igeikj kalikaci. Ciuglíq pilinguaq cetermi agyaugarkauguq. Nallu7 yagucaqunaciu X-aalil'eaka ceterti kegginacuaraam aciani elpecetun ayuqngalnguq.


59. Cotermun angyartalegrun pici. Aiparrama pirpakelanritaatnga.

75. Kí .isitóncik pilingurtalegmun tekitukut. Angutar ilaliuryunceggatnga.
77. Aqualleregnek pilinguartalegmun cetermun pici. Paqnakelanzitanka cat allat yuut pilisit.

Pitegciautmek pilinguartalegmun cetermun pici. Iclunriterrlainayuifua.
93. "pilinguallemun tuntuvagmun cetertan tekitukut, ilingi genertelartua.
2. Kalikartalegmun cetermun pici. Tangnirqurayulartua perr'unii-ilu.
4. Tua-1Iu ceten nusstcuartalek. Akngiznarcelrianka qaimni ardiariut.
20. Nuyiurutmek pilingualegmun cetermun pici. Ukvenggellriazuunga.
30. Pelagtalegmun cetemun pici. Cayuloa tamin maligtaqulanritaga.
40. X-atilaci kuskartalegmun ceterwun elliciqaci. Juminargellriaruanga.
56. Cetermun akertâlegmun pici. Llata tamarmeng aiparrams-11u pirpakelaraatngs. x-aalikici elpeci ajuqucikngalkevcenun.
58. Tua-ilu ceteq coiniglartalek. Ilara assikentitaatiga.
60. Ceteq tengsuutertalés, Unyuartecelartua ilamnun pirpaxenricuklua.
74. Ceteq cake-artalek. Arnat ilaltaryungeggaatnga.
76. Ceteq kuingirtalék. E! La tamalkuan cenzutaga.
78. Ceteq banènaxtánè. Ilalıupayunaicua.
92. Saskartalefunn cetermu plci. Ilini canek tmyat:eqelartua gallayuteksunailgruinck uraniz assiitet.
94. Waniva nangneqlirmun. pilinguamun texitukut eluskamun. Tua-qaa? Ilifni assif12n:1tanona generterrlulartua.

Ilinguaq ciuqlirmi cetermi ingriugut. Camek kiugarkarpecenek qanquma $X$-asiaciquci kegzinacuaraan aciani elpecetun ayuqngalngum nallinun. Atatcig kegginacuar piciuERIC ${ }^{\circ}$ niluku, ataucig-1lu piciurpallurniluis , atatciq-wa piciunciterriugniluku
 qapigniluku, Waniwa ataam kiugsrkarci. Uquelssiyaanritua kemitsilyaagpeknil-ilu. 9. Cetermun manarcuutelegrun pici. Tangoici iyucuelatun assikaga.
25. Cereq cuyactalek, Licyerni ayucucica cangalkentitaca.
27. Ceteq aingquartalek. Cangelkenritaga Agayutuun ukverumalga.
29. Tua-ilu una ceteq neqtātangqerciquq. Allamek neqtangqeliriangqertukut. Taugaam conrituq. Pilinguat ilait ataam aturaqiuki piciqaput. Kiucici ataan ellikiciki uum neqtalgem cetranun kegginacuaraam actanun. Agayuyaraqlua cali oinarqua agayuyaluager-2-ncílama.
43. Tua-liu ceteq paralulek. Cangalkenritua wangnek ayuqucimtun.
45. Cetcruon estuulurtalegmun pici. Assirnargetzoimtun assirtataunga.
61. Ceteq qe:rulligtalek tekitarput. Cangalkenritaca thannun ayuguciga.
63. Cereq ikarartalek, Taringumanka ilanka taringnargucimtun.



Kalikaci mungciki ciuclitmi cetermi cikiutmek pilinguartangqerciquq. Tua-qaa? Elluatumi uitalci murilkelluku.
79. Iialiuriyuncegtacimtun ilaliunqegtaunga.
81. Tua-1lu ceteq nutegtalek. Allat cangayugcetengnacelanritanka, taugaam anagutevicenid.
83. Ceteq qayagaur cuutelek. Piciunzitqapiztua ilalfuruten tungini.

95, Ceterai kenertalegmi. Yuut tamalkuta nalluaitelyeaka assikemitanka.
 Kite-an cetrani wani uitazrkauguci. Sustussiyaanricua sugkitsilyargpeknif-1iu.
10. Ceteq akertetalek, Ayuguciqa ayunncirkamitun ayugenritun.
12. "Tua-1lu ceteq napartalek. Neviarcarngarikanlrnarqua wall'u tanegurrarngarikanirnsrqua.
26. Ceteq 'lumarrartalek. Ukverumaunga ukverumayugtacimtun.
28. Ceteq naucetaaitaliek. Ukvekestenka amilerikanilsounayaaganka:
30. Cateraun angyartalegmun pici. Icluctuignii pinargua.
44. Nangneqliuguk una uni mumigtaami alifatek (ailumatek). Puqigtaunga pugigyugtacintun.


 62. Ceteq urluvectalek, Angayqaagha pinarcetacintun pilaragka. (pilallruagka, ak'a cuquilrukagnek)
64. Cetermin sap'áifrtalegmun pici. Cagassurarassilyaagzua ilan'a camek ganracata.
66. Cetermi putilikalegmun ellirtukut. Kenkekanirnarganka 1lanka.
80. Ceteq mingqutertalek. Cangalkenritaqa qaillun yout allat pilalleqnek.
82. Cetermun qanikcamek yugualegषun.pici. Allat Yuut pingegcaaraganirnarganka.
84. Coteq firtaizik. Allaz yut ilainucanitracsaaqanka.


13. Ceteq kalikartalek. Qática ei
15. Nangneqliq utiti Dumíztaagi akal:iaruuq. Qaillun ayuquciqa elluarrluku aulukelaraqs.

X-aalici kegzinacuziaan sciani elpecetun ayugngalngurmun.
17. Elintamek pilinguartalegmi cetermetarkauguci kalikaci mumigeskuvciki. Waniwa kivgaikarci. Cat tamaita otamancilngurtun ajucerilainalartua,

Nutaan ceteq kelassarialek. UKvega kesianek attituralaraga.
33. Ceteq isaccuinezalek. Esmingnachartua carek assianjureok pilga nallunritagamku.

49. Cetermun loilipop-artolegrun pici. Calga tamini wangnek aulukgugngaunga.
51. Tue-11u allamun angqertalogmun tcisicuiki: Pacivkalartua pillrunrilkengamnek gengerteksaunit.
53. Ceteq candie-artalek. Cat piciatun pilaranka yrayuarteqraarpeknif.
67. Ceicq uquicgartalek. Elluertiua aquinznzalartua áparraanka ilanka-llu ilagaraqamki.
69. Agyamun cetermun tekituci. Inaka pirpokluki callrit aligtaqultanka.
71. Ceteq wurtstalek nutaan. Angayucsin'sa maligtaqularagka. (maligtaqulaliruagka tuquilrukagnek).
85. Iux-1lu ceteq ussukcarzalek. Ilama wyuarit taringengnaquralaranka.

89. Uusi-cetermi.ciuqiiuguq kesglaq. Yut pellugcetelenritanka pigamek.
99. Taqmagtalegmun cetermun pici. Aguigaqana anagkengyunrulartua cirlaunruyullemni.
14. Ceteq enqifyazm ingleatanglek. iss!itiloa amilelartug.
16. Tua-1lu ceteq anuqetâlek. Plyutarueni equillemni-11u atawaunritua.
18. Cetercun tekicuiut acizizãiçant. Qavalca assilanrituq.
32. 2liailinctutelegana cetsitun pici. Cat atawaulvitt pirpallularanka.


50. Ceectiun pésurek ( Kayanônek) pikinglarcalegmun pici. Areaqiallugutenka
gecisglua arenqigtelaranka.
52. Tua-liu ceteq qusngirtalek. umyuaga citairturalaraqa.
54. Ceteq ipuussutaalek. Arenqiallugutenka qimangnaqelaranka.
68. Nangneqliq uumi mumigtaami kagitnguut. Kíngunemni caliarkanka pilaranka.
70. Nangneqlimun mumigtaamun tekitukut. Cetermi mulutuulegmi uitaarkauguci. Ilanka
aguagutelaranka.


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    \becauseanigtelie: Cimicuaqulleq-1lu
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 t.nutccosenaanka.

# TENNESSEE <br> (Department of Mental Health) <br> SELFCONCEPTSCALE 

by
WILLIAM H. FITTS, PAD.

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Counselor Recordings and Tests
Bol 6184 - Acklen Station Washville, Temessee 37212

YUK TRANSLATED MODIFIED VERSION
Pascal Afcan - Judith Harkins
:






TENESSEE SELF-COACEFT SCALE
Yuk Translated Modified Version ANSWER BOOKLET page

partly false

mostly partly true true


TENNESSEE SELF-CONCEPT SCALE Yuk Translated Modified Version


TENNESSEE SELF-CONCEPT SCALE Yur Translated Modified Version

 Yuk Translated Modifiled Version
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TENTESEEE SELP-COSCent SCADE Yuk Tranclated Modifieg Versfor
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# $\because:$ ： <br> （6．y心at 天ニ． <br>  

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Counseior Reco：aings and Tests
Box 6184，Acklen Station，Nasaville，Tennessee 37212

<br>Pasciel afcan－Judith Earkins

TENNESSEE-MI ELLMEGNEK TANGLLERMENG CUQYUTII: Yugtun Mumigtelleq Cimicuaqalleq-1lu

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TENNESSEE-MI ELIMEGGNEK TANGILERMENG CUQYUTII Yugtun Mumigtelleq Cimicuaqalleq-llu
KIUCIT KALIKAT 2


TFNNESSEE-MI FLLMECGNEK TANGLIEERMENG CUOYUTII Yugtun Mumtgtelleq Cimicuaqalleq-11u KIUCIT KALIKAT 3


Yugtur Mumptelleq Cimiruaqalieq-ilu KHICIT KALIKAT 4


TENNESSEE-MT ELIMEGGNEK TANGLLERMENG CUOYUTII Yugtun Munigtelleq Cimicuaqalleq-1lu KIUCIT KALIKAT 5


TENNESSEE-MT FIJ.MEGGNER TANGLIERMENG CUQYUTII Yugtun Sumigtelleq cimicuaqalleq-ilu KIUCIT KALIKAT


TENNESSEF-MI FLLMEGGNEK TANGLLERMENG CUQYUTIL
Yugtun Mumigtelleq Cimicuaqalleq-11u
KIUCIT KALIKAT 7

rfinnessee-mi ellmeggnek tangllermeng cioqutil Yugtun Mumigtelleq Cimicuaqalleq-ilu KIUCIT KALIKAT 8


TENNESSEE-MI EL.LMEGGNEX TANGLILERMENG CUQYUTII Yugtun Mumigtelleq Cimicuaqalleq-1lu KIUCIT KALIKAT 9


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INSTRUCDEONS :C: SNE
PARENT OPINIONATRE
Peabody-lisrlins
                                    (1971)
```


## Examiner,

We would like to have the parents of all the second year students in school in your village answer the PfRENT OPINIONAIRE. This well mean if there are 15 second year students in school land if they all have a mother and fathor able to answer the cuestions, we would have to have 30 PARENT OPINIONAIRES completed for that sch 001 .

The questions may be read to the parents. The point is not whether the parents ore able to read, but whether they have an enswor, or opinion.

The test may be given in the homes, or you may wish to have the parents core to school. Tho test may be given to the parents as a group, or presentid individually. Please be sure, however, that each parent answers without influence from another parent and please indicate in a corner of the answer sheet whether the opinionaire was responded to in a group situation.

All manuals and PAREM OPINAIRES when completed, are to be forwanded to: Judith S. Harkins, 1256 Redwood Court, Anchorage, Alaska, 99504.


Yuveriristemun,
Kinguqlirerak alränune'k elitenalerift angayugritnun tamaitnun nunaveeni kiuscwiaaput una kalikaq apecaileria ang.yYuabt UMEYUARTEQUTIIT. Lna waten ayuqeciqua: Akimianek eiitencurartangqergan kinguqliremi alrakumi elitenaulziianek, cali tamareneng uxut elitenaulerift aanangqerqata aatang-qerçata-11u kiwytalerifjenek afequarutrek, yoinaq-qulenek akurtureyugeyaçukut tuaken elitenauleriit elitenaureviata nuniitnek ANGAYUQAAT UMEYUARTEQUTAITNEX isiumelersanek qaqilluteng.
 Angayuqaaz naaciyugengaľit wall'u razciscifgatelrit catengungaituq, taugaam


Naspanyun yuit elláia ensitni hall'u elitenaurevigemi piyukatgu piciacun pinarcuq. Naspaayun axierenun wall'u atauciuqaqluki ançayuqanun piyugtacifcetun piytnarguq. Taugaam angayfqaat allanek yugenek atanirturenarqenerziut qailitn kiunieraiegnz. Cali kalikam kangiranun igaulluku qafllun naspaayun pivkalrulranek, katungqaluki angayuqaat wall'u atauciuqaqluki.

Tawalkutta kalikat ANGAYUQAT-LLU UYEYUARTEQUTIAT tamalkufta inimarikata tuyuqnarqut wavet: Judith S. Harkins, 1256 Redwood Court Anchorage, Alaska 99504. (Air Mail-areluki).

Quyana cakneq ikayureluta.

Judith S. Harkins



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    {访
```

-i.:

 そC.IT iar.s.




I. Information
9. Do you know the nate of vour child'c teacher? ves ..... nob. ohat 1 c 1 t ?c.Is there orincioal at vour child's echool: yesnoA. 'hat $i c$ his name
$\qquad$
e.tow much calary तo vou zups vour child'c teacrer rakes everv month?f.Does the lav sav voir inild has to $\%$ to schoolf yesno
Q. If there is a law. ioes it toll him to so untila certain gse?
h. If you sald yes to iter 'g', what ace do vouthink the law says he must be when he leavesschool?

1. What does the word 'droo-out' rean ', are talking about children?
G.Guess the answer to this auestion. Out of 10 children that oo to chonl in vour village, hon many will start in the first grade, and will stay until they finish leth arafe?
k.Guess how much monoy it cocts to educate vour chlld for one year. $\qquad$
2. There does the roner como from to oav the teacher. buy the books. heat the schonl and other thincs so your chlld can $\mathrm{c}_{0}$ to school? ho really bats for it?
r. Mat is your child learnink in school? $\qquad$

## II. Comrunications

a.Have you talked with your child'e teacher this yezr?

Farent ovintonatre
 0ase?

Yes
yes
yes

Yes

1. What do you like about the meetinss. if you go?
ves
2. If you don't ao to the meetings, why to you stay anar? $\qquad$
$\qquad$

## III, Attitude

a. dould you like vour crill to become a teacher when he arows up?
b. That do you think about the money that teachers are paid?
$c$. Shat do you trink about the teacher'a
lob? oo
tco easy
no
d. Do you think good teachers gre hard to find?
ves
no
no
no
Farent oolnionalre
resoodv-iarkins
onge 4
p.Are most teachers rood at their lobs? yes ..... 10
h. That do vou thln' or tho ccoonl bulldine?tootoobie little

1. If vou said it is 'too little'. 'hat toyou think should be atios?_ _
$\qquad$
A. Should the school bulldint be ueod ror other things besite teaching chiliror:
ves
no

## IV. General Rapoort

a. hat gre the best fhines zoout vour chllise school?
b. Does the school nave any bla oroblems? yes no c. If 'yes', bhat are they?
A. sould you like to rolo ris the school? yes no
e. Nould you lixe to decise ino sho:ld teach? yes no
f. That subjects to vo'd thin'e should he tqusht?

## Alerquatet

Imirenarqut tamalkuita camkut nalluneritnarqelri:t uyagenfrenarquq-11u kiuluki tamalkuita apeqaurutet piyugengatacimitun elluarlluki. Nalluneritenarqeneritaput kituucin.

Kiucit tamaremens igautnarqut apeqaurutnun kalikanun tegumianun. Kiucit tamalkuita tuavet elliscligalkata aciitnun wall'u allamun kalikamun pingeremeng cangaitut.

I. Nallunairutet
a. Nalluneritan-qaa ireniarpet elitenaurtiin atra?

b. Kituuga atra? $\qquad$
c. Ireniarpet-qaa elitenaureviand angayuqerpagtangqertuq?

d. Kituuga atra?
e. Qayutun akingelareyuksiu ireniarpet elitenaurtii ataucimi iralumi?
f. Alerquutenguaq-qaa irenian elitenaurenaqniluku?

qang'a
g. Alerquatetangqerqan, alerquun-qaa qanerumaqq qavcinek alrakungelranun elitenaurenaqniluku?
h. Angelrukuvegu "g."-aq, qavcinek alrakungqernaqsuksiu elitenaulerifm taqlerkaa alerquitem pisqutii atureluku? $\qquad$
i. Camek yuut qalartaqameng (Kass'atun)'Drop-out'-aanek pilartat? $\qquad$
$j$. Apengenaqkiu uum kiucia. Ouleni mikelengureni elitenauleriani qavein qula-malerugenek alrakurluteng qaqiciciqat? $\qquad$
k. Apengenaqiu qayutun akingqelra ireniarpet elitenaulra ataucimi alrakumi

1. Kia akilitelartaki elitenauristet, kia-ilu kalikait akilitelartaki, cali allat mikelengurpet atureyukengai elitenaureyaquni? Kia ilumun akilisengaaki tamakut? $\qquad$
$m$, Canek elicarelarta irenian eldtenaurevigemi?
II. Qaneruquraun
a. Qallaruteqaqsaitan-qaa irentarpet elitenaurtii mat'umi alrakumi?


## Angayuqaat Camek Umeyuartequciit Peabody-Harkins 3

b. Kalikangelruuten-qaa wall'u catnek piciatun igausengaleriamek elitenaurevigemek uumi alrakumi?

c. Ireniarpet-qaa canek galarutelaraaten elitenaullereminek? Tiyi qang ${ }^{\dagger}$ a
d. Ouvarteliyalruuten-qaa umi alrakumi elitenaurevigemi?
 qang'a
e. Ireniarpet-qas elitenaurevia nalluneriqanireyugan?

qang ${ }^{1}$
f. Angelrukuvet caqapiaraat nalluneriqanireyugciki? $\qquad$
g. Angayuqanun-qaa elitelauristenun-Ilu quyurtetulinun ilagausengauten? (PTA)

i. Cat assikelarciki quyurtaqavci?

1. Quyurteliyarelanerilkuvet, caqapiaraam quyurteliyarcecugelaneritaten?

## III. Umeyuaquciq

a. Elitenauristengurcesqumaan-qaa irenian angelikan?
b. Cangalkessiu elitenauristet akingutait?
anagutuq
ikgetsiiyaagtuq pitalqegtuq
c. Cangalkessiu elitenauristem caliara?
capernaqsiiyaagtuq qacigenaq̧silyaagtuq pitalqegtur
d. Assileriit-qaa elitenauristet paivenganericukaten?

f. Umeyuarpeni-qaa elitenauristet akIngutait amlerikanirenarqut alrakuaqan?
$\qquad$

Angayuqat Camek Uneyuartequeiit Peabody-Harkins 4
g. Elitcrauristet-qaa assirpallurtut caliamegni?
ilyi, qang'a
h. Cangalkessiu elitenaurevigci? angsifyagtuq miksilyaggtuq pitalqegtuq

1. Miksiiyaalrurikuvegu, camek ilakanirenaqsuksiu? $\qquad$
j. Elitenaurevik-qaa canun allanun aturenarquq elitenaulerianun kingitnun pivkenanku? $\square$ q ang'a
IV. Uitanqegeitman
a. Cat assinkacagaugat ireniarpet elitenaureviani? $\qquad$
b. Elitenaurevigci-qaa canek arenfiallugutengqertuq?
ifyi
qang ${ }^{\prime}$ a
c. Arenqiallugutengqerqan, caugat areqiallugutai? $\qquad$
d. Ikayuucugtuten-qaa elitenaureviim egelerutelranun? $\square$ qang'a
e. Elitenauristekanek-qaa cucukilerianun ilagaucugtuten?

f. Canek elitenaurinaqsuksiki elitenaurtet?

TABLES

ERIC

PNily I (Information) $=14$ poincs

| Quosilion \# | Points | Question Qu | titntive Coning |
| :---: | :---: | :---: | :---: |
| a | 1 | Do you kivw tho mathe of your chilu's tancrin? | yes:- ]. $\mathrm{no}=0$ |
| b | 1 | What is it? | any ancwor=1. |
| c | $\mathrm{n} / \mathrm{a}$ | (question delcted from consjoderation) | , anctacx=0 |
| d | 1 | What is: hist mome? | ary alswer. 1 no ancwos=0 |
| c | 2 | How mach sialiry do you guoss your chind'si teache makes cuery monith? $\qquad$ $\qquad$ | $\begin{aligned} & \$ 200-8500=? \\ & \$ 100-8200 \\ & \$ 00-500=1 \\ & 0120380 \end{aligned}$ |
| I | a | Doos tinc lite siy your child has to go to scioul" $\qquad$ | yest 3 ; $\mathrm{no}^{\prime}=0$ |
| 4 | a | If there js a lav, does jt tell him to go until a coxtain ago? $\qquad$ | yosm; $\mathrm{no}=0$ |
| h | 1. | If you side yos to itom "g," what age do you think the law says he must be when he leaves school? $\qquad$ | $\begin{aligned} & \text { 3 } 4-1.8=3 ; \\ & \text { otherwise }=0 \end{aligned}$ |
| $i$ | 1 | What does the word "drop-out" mean when poople are talking about children? $\qquad$ | posjetive response-l; <br> obincrwisc=0 |
| $j$ | 1 | Guess the answer to this question. Out of 10 children that go to school in your village, how many will start in the first grade, and will stay until they finish 12 th grade? $\qquad$ | $\begin{aligned} & 2-4=1 ; \\ & \text { otherwise }=0 \end{aligned}$ |
| k | 2 | Guess how much money it costs to educate your child for one year. $\qquad$ | $\begin{aligned} & \$ 900-\$ 1500=2 ; \$ 700- \\ & \$ 900 \text { or } \$ 1500-\$ 1800= \\ & 1 ; \text { otherwise:0 } \end{aligned}$ |

FMcan of all responses for this itom was $\$ 395.00$. This was used as the basis for evaluation of the responses.

1

## 1

1
m
PART II（Comumications）$=35$ pointe

3

3

5

5

5

2

5
3
2

2

Whare doas the moncy con：from to piy the toacher，buy the look：s，hout the sebhers iad other thinge so your cinild cam go to scincos？ Wino ruwliy pays for it？ $\qquad$ －

What is your child lcarring in school？ $\qquad$ －－

```
govarmment=?;
Othcetisse=0
porsi: ive re:
```

ycu:-3;
oifc:visc=0
y-:-3;
ocl心: いisc=0
yourr; othovi 0
Yos: -5;
olborvise=0
yot- 5 ;
Gilorwise=0
positive res
Oihciwise=0:
yes=5; othera: :- 0
ycs=3; otherwi.i o:
positive rc., ハッ.:-2;
otherwise $=0: \therefore:$
positive responser-2;
otherwisc $0 \therefore \therefore \therefore:$
＊Scon on ony for those respondents who answered＂yes＂to guestion Ile． ＊＊Scored only for those respondents who answered＂yes＂to question IIg．
＊＊＊Scored only for those respondents who answered＂yes＂to question Ilh．
＊＊＊＊Scored only for those respondersts who answered＂no＂to question IIh．

| gustifunit | roin': | Suestion Sound | itative coding |
| :---: | :---: | :---: | :---: |
| ¢ | 5 |  whors ha: gaco.: !e? $\qquad$ $\qquad$ | $\begin{aligned} & \text { yos-5; } \\ & \text { othernise }=0 \end{aligned}$ |
| $b$ | 5 | What du son thind aboul the money that ionchers ane poine $\qquad$ $\qquad$ $\qquad$ | ```too little=5; ju:\mp@code{l right=:%;} too much=0``` |
| $c$ | 5 |  | too herd=5; jut. <br>  cire? |
| $d$ | 3 |  | Y: 3: othc:-6, 0 |
| c | 2 |  | yos $2:$ cuhc: $\because 0$ |
| f | 3 |  they toms: ${ }^{\text {f }}$ | yes: 3; <br> oilecriise=0 |
| 9 | 3 | Are mosi loachorg ¢ , at their jobs? | yes=3; othei-wisc:0 |
| 12 | 2 | What do yeut think of the school builaing? | too little=2; just right=2; too bigeo |
| i | 2. | If you said it is "too littl.c," what do you tiaink should be added? $\qquad$ | positive rosponse=2; otherwise $=0$ : |
| j | 2 | Should the school building be used for other things beside teaching children? $\qquad$ | $\begin{aligned} & \text { yes }=2 ; \\ & \text { otherwise }=0 \end{aligned}$ |
| PART 3.V (Gencial Ropixori) = 19 points |  |  |  |
| $a$ | 2. | What are the best things about your child's school? $\qquad$ | positive response:=2; otherwise=0 |
| *scorud only for thosic respondents who answered "too little" for question IIIh. |  |  |  |


b
c

## Inu: :

2

2
a
e

- 5
f

Question
Doce hac semonl have athy big probleme? $\qquad$
If "yus." whel are time? $\qquad$ ... . . ....................

Would you like to heTp run the school? $\qquad$
would you like to deeinc: wh should teach? $\qquad$
bun subjouls cio you thime shomad be taught? $\qquad$


## Qumtitative codis:

rov:2; yes=0
poritive rospomser ; otherwisc-0:
ycri:5;
ocherwise $=0$
yes $=5$;
Othค1v:L:n=0
pusidive ramonse=3;
whie VI - ?arenc oninicnsire fest - Gcodness of Fit for Normality

| $\begin{gathered} \text { Distribution } \\ \text { class } \\ \hline \end{gathered}$ | $\pm$ | $\begin{aligned} & \text { Cjass rid } \\ & \text { Poine (s) } \end{aligned}$ | $\underline{\mathrm{fx}}$ | $\mathrm{x}^{2}$ | $\mathrm{fx}^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 50 | 1 | 48 | 48 | 2304 | 2304 |
| 51-53 | 3 | 53 | 159 | 2809 | 8427 |
| 56-50 | 6 | 53 | 232 | 3364 | 13456 |
| 61-70 | 12 | 63 | 693 | 3969 | 43219 |
| 72-80 | 25 | 68 | 1700 | 4624 | 115600 |
| 81-90 | 2 | 73 | 146 | 5329 | 10658 |
|  | 45 |  | 2978 |  | 204322 |

i.ears $=297 \varepsilon / \div 0=86.7$

Stancara Deviation $=\sqrt{\frac{201522-46(04.7)^{2}}{46}}=15.99$

| $\begin{gathered} \text { Distribution } \\ \text { Ciass } \\ \hline \end{gathered}$ | Normal Deviate* | Area to the Left of cer | Area of Class Interval | Expected Frequency |
| :---: | :---: | :---: | :---: | :---: |
| $<50$ | -0.92 | .1783 | . 1788 | 8.2 |
| 51-55 | -0.61 | . 2709 | .0921 | 4.2 |
| 56-60 | -0.29 | . 3859 | . 1150 | 5.3 |
| 61-70 | 0.33 | . 6293 | . 2434 | 11.2 |
| 71-80 | 0.96 | . 8315 | . 2022 | $9.3{ }^{\text {a }}$ |
| $>80$ | $\infty$ | 1.000 | . 1685 | 7.8 |

*Standard Deviate $=\frac{x-64.7}{15.99}$

| observed (o) | expected $(\mathrm{e})$ | $(0-e)$ | $(0-e)^{2}$ | $\frac{(0-e)^{2}}{\mathrm{e}}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | 8.2 | -7.2 | 51.84 | 6.32 |
| 3 | 4.2 | -1.2 | 1.44 | 0.34 |
| 4 | 5.3 | -1.3 | 1.69 | 0.32 |
| 11 | 11.2 | -0.2 | 0.04 | 0.00 |
| 25 | 9.3 | 15.7 | 246.49 | 26.50 |
| 2 | 7.8 | -5.8 | 33.64 | $\frac{4.31}{37.79}$ |




| Tost Saction | $\begin{aligned} & \text { Control } \\ & (\text { Eng } h i m i n) \end{aligned}$ | $\underset{(X, k)}{E x p o r i m e n t a l}$ | $\begin{gathered} \text { Difference } \\ \text { di } \end{gathered}$ | Ranks | Negative Ranks ti |
| :---: | :---: | :---: | :---: | :---: | :---: |
| こ | 8.5 | 9.1 | 0.2 | +2 |  |
| 2 | 22.3 | 22.2 | -0.1 | -1 | -1 |
| 3 | 23.7 | 25.3 | 1.6 | +3 |  |
| 4 | ¿2.0 | 14.2 | 3.6 | +5 |  |
| 50EE1 | . 66.4 | 70.8 | 4.4 | +4 | - |
|  |  |  |  | total $=$ | 1 |
| $n_{T}(\text { expected value })=\frac{5(6)}{4}=7.5$ |  |  |  |  |  |

$\sigma_{T}$ (expected negative ranks standard deviation) $=\sqrt{\frac{(5)(6)(11)}{24}}=3.7$
$z($ normal deviate $)=\frac{1.0-7.5}{3.7}=1.76$

Signisicant at $\because=.04$



| t.ancuago |  | $5 \cdot 24$ | $\leq 24$ | Total |
| :---: | :---: | :---: | :---: | :---: |
| English |  | 6 | 8 | 14 |
| Yuk |  | 25 | 7 | 32 |
| motal |  | 31 | 15 | 46 |
| (observed) | (expected) | $(0-e)-\frac{1}{2}$ | $\left.\left[(0-e)-\frac{1}{2}\right]\right]^{2}$ | $\frac{\left.-e)-\frac{t_{2}}{2}\right] 2}{e}$ |
| 0 | 9.4 | -2.9 | 8.41 | 0.89 |
| 8 | 4.0 | 2.9 | 8.41 | 1.83 |
| 25 | 21.0 | 2.9 | 8.41 | 0.39 |
| 7 | 10.4 | -2.3 | 8.41 | 0.81 |

Sigaizicant at $0=0.05$



| Class | $\bigcirc$ | c | (o-e) | $(0-\mathrm{e})^{2}$ | $\frac{(0-c)^{2}}{e}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $<200$ | 1 | 2 | -i | i | . 5 |
| 201-270 | 5 | 3.2 | 2.2 | 4.84 | 1.512 |
| 27i-280 | 5 | 5.5 | -0.5 | 0.25 | 0.045 |
| 281-290 | 11 | 7.7 | 3.3 | 10.09 | 1.414 |
| 29-300 | 7 | 3.0. | -1 | 1 | 0.125 |
| 301-3i2 | $\dot{4}$ | 0.3 | -2.8 | 7.84 | i. 152 |
| $32-320$ | i | 4.4 | -3. ${ }^{\text {s }}$ | 2.56 | 2.627 |
| 322-330 | 6 | 2.2 | 3.6 | 2.1.4, | 6.563 |
| $>330$ | + | i. | -0.2 | 0.02 | 0.009 |
|  |  |  |  |  | 13.947 |
|  significam ar - : $=0.05$ |  |  |  |  |  |
|  |  |  |  |  |  |





| びっすこ |  | $\begin{gathered} \therefore 020 \\ 270-316 \end{gathered}$ | Else | ＇rotal |
| :---: | :---: | :---: | :---: | :---: |
| Ingiosis |  | 56 | 4 | 20 |
| Yus |  | 9 | 12 | 21 |
| Motal |  | 23 | 16 | 41 |
| 0 | c | $(0-2)^{-1}$ | $[(0-e)-3 / 2]^{2}$ | $\frac{\left[(0-c)-i_{i}\right]^{2}}{c}$ |
| 26 | $\div 2$ | 3.5 | 12．25 | 1.00 |
| $\therefore$ | 7.3 | －3．5 | 12.25 | 1.57 |
| 9 | i2．0 | －3．5 | 12.25 | 0.96 |
| 12 | 5．2 | 3.5 | $\div 2.5$ | 1． 49 |
|  |  |  |  | 5.02 |



ThBLE KVII－Chi Scuare positive Identivy score for yTsCS Eetween 95－107

| Growi |  | $\begin{gathered} 500 \mathrm{ra} \\ 95-907 \end{gathered}$ | Else | Toual |
| :---: | :---: | :---: | :---: | :---: |
| Eng 2 isi |  | －2 | 8 | 20 |
| Yuk |  | 2 | 19 | 21 |
| Tocal |  | 14 | 27 | 41 |
| 0 | 0 | $(\mathrm{O}-\mathrm{c})^{-\frac{1}{2}}$ | $[(0-0)-i]^{2}$ | $\frac{[(0-e)-3]^{2}}{e}$ |
| 12 | 6.0 ＇ | $-8.3$ | 10．8j | 2.715 |
| － | $\div 3.2$ | $-4.3$ | 13．49 | 1．4．00 |
| 2 | 7.2 | －4．3 | 28．49 | 2． 563 |
| 19 | $\pm 3.8$ | 4.3 | 20．89 | $\therefore .339$ |
|  |  |  |  | E． 26 |

Significant at 0 ＝． 02
mbie XVIII－Chi Squave Row 3 Positive Behavior Score for Y＇SCS 3心tween 93－3．03

| Group |  | ore | Else | Total |
| :---: | :---: | :---: | :---: | :---: |
| ごらすこうに |  | 3 | 7 | 20 |
| Yui |  | 2 | 19 | 21 |
| Poさai |  | 5 | 25 | 41 |
| $\bigcirc$ |  | $(0 \cdot 0)^{-\frac{1}{3}}$ | $[(0-e)-1]^{2}$ |  |
| 2 | 7.7 | －5．5 | 30.25 | 3.93 |
| 19 | 13.3 | 5.3 | 30.25 | 2.27 |
| 23 | 7.3 | 5.5 | 30.25 | 4.14 |
| 7 | 12.7 | －5．5 | 30.25 | 2.38 |
|  |  |  |  | 12.72 |
|  |  |  |  |  |

＂ABLE XIX－Chi scuare Colum A Physical Self Score for Yascs Beween 53－6i

| Growo |  | $\begin{aligned} & 5 c o z e \\ & 53-62 \end{aligned}$ | Else | Fotal |
| :---: | :---: | :---: | :---: | :---: |
| Encinsid |  | 20 | 4 | 20 |
| Yuk |  | 0 | 15 | 21 |
| rotar |  | 2.2 | 19 | 41 |
| 0 | C |  | （0－0）－52 | $\frac{[(0-e)-2] 2}{e}$ |
| iu | －u．； | $4 \cdot \sim$ | 23.04 | 2.15 |
| $\stackrel{4}{4}$ | 5.3 | $\cdots$ | 23.04 | 2.45 |
| 6 | i．．j | $-4_{1} .6$ | 23.04 | 2.04 |
| 25 | 9.7 | 4.3 | 23．04 | 2.37 |
|  |  |  |  | 9.01 |


$-173-$

| Group |  | $\begin{aligned} & \text { Scote } \\ & 50-5 y \end{aligned}$ | Else | rotal |
| :---: | :---: | :---: | :---: | :---: |
| Engiish |  | 2 | 18 | 20 |
| Yuk |  | 20 | 12 | 21 |
| rotal |  | 12 | 29 | 41 |
| $\bigcirc$ | e | $(0-\mathrm{e})-\frac{1}{2}$ | $\left[(0-e)-\frac{1}{2}\right]^{2}$ | $\frac{\left[(0-\mathrm{e})-\frac{2 / 2}{}\right]^{2}}{e}$ |
| 2 | 5.35 | -3.65 | 9.3 | 1.39 |
| 12 | 2:.25 | 3.65 | 9.3 | 0.66 |
| 10 | 6.35 | 3.05 | 9.3 | 1.51 |
| ir | 14.035 | -3.05 | 9.3 | 0.63 |
|  |  |  |  | 4.39 |
| Signiticani ito $=0.05$ |  |  |  |  |




$$
G_{i,}=\sqrt{\frac{n(i-1)(2 a+i)}{24}}=11.2
$$

$$
z=\frac{T-u}{G_{T}}=\frac{-11.5-33}{-11.2}=-1.919
$$

## Sagnificant at $0<=.03$


Date Tosted - Mocomber ] 1,1973
Villasie - Nunapitohuk



Date Testoci - Ducemer 19\%2
Villagn - Nopaiat
Villagn-Nondiak


*viliages using the Yuk Educational program in their schools

| iource of | $3 . a 13$ O | Degrees of wreciom | Mean |
| :---: | :---: | :---: | :---: |
| Variation | Ggubucs | Erecaom | Scjuares |
| A | 5264.7 | 2 | 3264.7 |
| B | 3073.3 | 1 | 3078.3 |
| A3 | 780.6 | 1 | 780.6 |
| c | 2214:3.9 | 4 | 5537.2 |
| $\therefore \mathrm{C}$ | $46.2{ }^{\circ}$ | 4 | 115.3 |
| $\because \mathrm{C}$ | 22262.0 | $i_{s}$ | 5540.5 |
| $\triangle \mathrm{BC}$ | 26is. ${ }^{\text {a }}$ | 4 | 60.3 |
| i | $\pm 32.5$ | 1 | 132.9 |
| errox | 2951.2 | 19 | 102.7 |
| 2otal | 50221.2 | 39 |  |

Variabie
Fiv
$\vec{i}_{i}$
$P_{3}$
${ }_{C}$
$F_{A B}$
$\mathrm{F}_{\mathrm{AC}}$
$F_{B C}$
$F_{A B C}$

Conoutation
$132.9 / 102.7=1.29$
$5264.7 / 202.7=51.3$
$3078.3 / 102.7=30.0$
$5537.2 / 202.7=53.9$
$780.6 / 102.7=7.6$
$115.3 / 102.7=1.12$
$5540.5 / 102.7=54.0$
$60.34 / 102.7=0.59$

Significance
none
.001
.001
.001
.025
none
.001
none

* The ANOVA computer program from the IBM 1130 Scientific Sabroutine Package was utilized for calculations of Sums of Squares and Mean Squares.


| Group |  | \& $<27$ | ¢ > 27 | Total |
| :---: | :---: | :---: | :---: | :---: |
| Enc, 2 Sa |  | $j$ | 15 | 20 |
| Y |  | 25 | 5 | 21 |
| Powas |  | 23 | 20 | 41 |
| $\bigcirc$ | e | (0-0)-5 | $[(0-e)-1]^{2}$ | $\frac{\left[(0-e)-\frac{1}{2}\right]^{2}}{0}$ |
| 10 | ij. 75 | 4.72 | 22.47 | 2.09 |
| j | 20.24 | $-4.7 \cdot 8$ | 22.:7 | 2.19 |
| 5 | こ. 24 | -i.7i | 22.47 | 2.19 |
| 15 | 9.76 | $\therefore .7 \%$ | 22.47 | 2.30 |
|  |  |  |  | 8.77 |



FinEu xXX - Cai Square Languase pezaeption Score for SRA (Score)

| GEOL? |  | Score 290 | Score < 90 | Total |
| :---: | :---: | :---: | :---: | :---: |
| Engitsi |  | 24 | 6 | 20 |
| Yuk |  | 6 | 15 | 21 |
| Total | 20 |  | 21 | 41 |
| $\bigcirc$ | e | $(0-0)-\frac{1}{2}$ | $\left[(0-e)-\frac{i_{2}}{3}\right]^{2}$ | $\frac{\left[(0-e)-\frac{1}{2}\right]^{2}}{e}$ |
| 6 | 2\%.2\% | -3.74 | 13.99 | 1.37 |
| - | 20.76 | E. $7 \%$ | 13.99 | 1. 30 |
| $\therefore:$ | 9.75 | 3.74 | 13.99 | 1.43 |
| 0 | 20.24 | $-3.74$ | 13.99 | 1.37 |
|  |  |  |  | 5.47 |

Signi\&icant at $6 \in=0.02$




| Srous | Score $>12$ | Score < 12 | Total |
| :---: | :---: | :---: | :---: |
| zagisis | 13 | 7 | 20 |
| Yu* | 6 | 15 | 21 |
| Total | 19 | 22 | 41 |


| $\bigcirc$ | e | $(0-e)-\frac{1}{2}$ | $[(0-e)-3 / 2]^{2}$ | $\frac{\left.[(0-e)-3]_{2}\right]^{2}}{e}$ |
| :---: | :---: | :---: | :---: | :---: |
| 三 | $\because \because$ | -3.23 | 10.43 | 1.07 |
|  | こ- | 3.23 | 10.43 | 0.93 |
|  | $\therefore$ | 3.23 | 10.43 - | 1.13 |
| 7 | 10.73 | -3.23 | 10.43 | 0.97 |
|  |  |  |  | 4.10 |

Significant at $0=0.05$


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                    2005
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Bunay, z. S. nim onows. Stucios in Cognitive Growtin. New
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Nowney, Zawronce f% mnemask of Public Pducation. University
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Fitts, \(\because\) :iian \(H\). ane Self Concent and fuman Behavior: A
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Galion, Coonce Von tion \(\because\) Gion Uiews the puolic Scioois.戶rincesö, a
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mirenta，ilovin Gacisns extish Sueating Children．Alouquer－

隹：


Wivic，スath C．Fige Seif Concops：A Critical Survey of


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