

**A SOCIOMETRIC STUDY OF RACIAL CLEAVAGE  
IN INDIAN - WHITE GROUPS**

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**by  
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## ABSTRACT OF THESIS

The present study was prompted by the realization that few of the many reported studies on racial prejudice have dealt specifically with prejudice towards North American Indians. Many studies have investigated the interrelations of Whites and Negroes or Whites and Jews, but not of Whites and Indians. The purpose of this study was to investigate the interracial relationships existing in groups comprised of Indians and Whites.

The subjects used in this study were 682 Manitoba public school children and 139 male adult construction workers. The children comprised twenty classrooms drawn from grades 2, 4, 6, 8, and 10. Each grade level was represented by four groups differing in degree of minority concentration as follows: (a) 1 or 2, (b) 3 or 4, (c) from 5 to 7, (d) 8 or more Indian and Metis members in a group. Similarly, the adult level was represented by four groups differing in degree of minority concentration.

The sociometric test was administered to the members of each group. Two criteria were used and three choices were requested for each criterion.

The results were appraised in two major ways: first, the effect of age on racial self-preference, and second, the effect of minority group concentration on racial self-preference.

Cleavage between Whites and Indians was found in both school and adult groups. Young White children exhibited high self-preference which decreased as grade level increased. Young Indian children showed very little self-preference, but self-preference was found to increase

gradually as the grade level of the Indian subjects increased. The highest degree of self-preference was exhibited by White girls, whereas Indian girls showed the lowest self-preference. White boys and Indian boys both showed self-preference of a degree intermediate between that shown by the White and Indian girls. Both Whites and Indians showed greater willingness to work with, than to sit near, members of the other race.

White children showed increasing self-preference as the concentration of Indian children in the groups increased. Although self-preference was absent in Indian children constituting only one or two members of a classroom, it was present when their numbers increased to three or four. It reached its highest degree at the five to seven concentration level and fell off somewhat in classrooms containing eight or more Indian children.

Racial self-preference was clearly evidenced at the adult level. Both Whites and Indians showed increasing self-preference as the concentration of Indians increased. Both showed greater willingness to work with than to room with members of the other race.

Group differences in White self-preference ratios were believed to reflect differences in age, minority group concentration, educational and occupational levels. In the case of the Indian subjects, group differences in self-preference ratios were considered primarily attributable to the degree of minority group concentration and to the amount of awareness of their position as minority group members.

It was concluded that the self-preference of the White subjects reflected cultural stereotyping, while that of the Indians was due primarily to the direct experience of being rejected by White persons.

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## CHAPTER I

### THE PROBLEM AND THE INTRODUCTION

#### I. STATEMENT OF THE PROBLEM

This study attempts to ascertain the influence of two variables, age and degree of minority concentration, on measures of racial cleavage in Indian - White groups in the Canadian Province of Manitoba.

Therefore, the study will investigate the following questions:

1. Does the age of the group members influence the relationship between majority (Whites) and minority (Indian or Metis<sup>1</sup>)?
2. Does the degree of minority concentration influence the relationship between majority and minority?
3. Is there an interaction between age and minority concentration that influences the relationship between majority and minority? If so, what is the nature of this interaction?
4. Do girls show sharper cleavages from the other racial group than do boys?
5. Does the Indian - Metis minority show more intense withdrawal into itself than does the White majority?
6. Are there any factors tending to lessen majority-minority cleavages? If so, what are some of these factors?

#### II. INTRODUCTION

The necessity for a study of the kind here proposed was realized when a review of the bibliography of the Economic and Social research Branch of the Canadian Department of Citizenship and Immigration revealed a considerable number of historical and fictional accounts

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<sup>1</sup> Metis - a person one of whose parents is White and the other Indian.

of the Canadian Indian, but only a meager smattering of scientific studies dealing with the Indian and Metis and their present day problems and status. These scientific studies dealt with such topics as anatomical differences, economic problems, housing and sanitation problems on reserves and academic achievement of Indians and Metis. It was felt that a study that investigated the extent to which Indian and White members of a group are accepted by each other would be of considerable value.

Within the last few years, mining, forestry, hydroelectric developments and military establishments in the Canadian North have brought an increasing number of Indians into close contact with the White man and his "civilization". Many Indians have obtained laboring jobs in these Northern developments, while others, forsaking the old ways completely, have moved into the cities and towns to seek a new life. These circumstances have effected a heightening of the Canadian public's interest in the Indian and his welfare. Churches, social welfare agencies and other interested groups have assisted the Indian Affairs Branch in helping Indian and Metis to become oriented to their new environment.

However, all Whites have not welcomed the Indian. Derogatory epithets similar to those applied to the American Negro have been used with reference to the Indian. He has been accused of being lazy, stupid, irresponsible, filthy, drunken, given to violence, immoral, and so on. "Indian ghettos" have been exposed, "good, solid citizens" have loudly protested when Indians or Metis wished to move into their residential areas; economic exploitations and discriminatory employment

practices have been hinted at. These publicized events have prompted various disciplines to investigate, as fully as possible, all aspects of the situation of the Indian and Metis.

The thesis commences with the historical view of racial and ethnic prejudices. It also discusses the various ways in which prejudices are acted out. Some of the more significant racial prejudice studies are next examined. Then follows a discussion of studies pertaining directly to the North American Indian. This historical review of the literature is concluded with an examination of research on specific factors influencing racial prejudice: the effect of age, the effect of minority concentration, boys' and girls' self-preferences, the effect of contact with minority group members.

The introduction is followed by a description of the subjects involved in this study, the test used and the procedure followed. The results are then presented and discussed. The concluding chapter summarizes the results and implications of the previous chapters.

### III. THE NATURE OF RACIAL PREJUDICE

#### Definition of Racial Prejudice

English and English(27) define prejudice as the "failure or refusal to consider a person's own individual qualities, reacting to him instead as if he possessed the qualities (especially the unfavorable ones) that rightly or wrongly are attributed to his social group".

In common usage "racial prejudice" refers to an unfavourable attitude towards any religious, racial, national or cultural group. This is the sense in which the term "racial prejudice" will be used by the author.

### Classification of Racial Prejudice

Gordon Allport (2) lists five degrees of the acting out of our prejudices.

1. Antilocution - This is just the "talking prejudice" that at times seems to be almost idle chatter. Usually, this antagonism is expressed rather freely. Many people, Allport contends, never go beyond this stage.

2. Avoidance - The burden of inconvenience by avoiding the disliked group is, of course, borne by the prejudiced person himself.

3. Discrimination - The prejudiced person here takes action to exclude the disliked group from certain jobs, clubs, educational facilities, residential areas and so on. Segregation is discrimination that has become institutionalized through custom or legal force.

4. Physical attack - This may take the form of violence, race riots, desecration, forcible ejection, etc.

5. Extermination - This, the ultimate expression of prejudice, takes the form of pogroms, lynchings, and genocide on the scale carried out by Hitler.

Allport (2 p.15) illustrates the ease of transition from one level to the next level by this illustration:

"It was Hitler's antilocution that led Germans to avoid their Jewish neighbours and erstwhile friends. This preparation made it easier to enact the Nurnberg laws of discrimination which, in turn, made the subsequent burning of synagogues and street attacks upon Jews seem natural. The final step in the nacabre progression was the ovens at Auschwitz."

The present study, as it is dealing with racial cleavages, is actually investigating an example of Allport's second level of acting out prejudice - that of "Avoidance".

#### IV. FACTORS INFLUENCING RACIAL PREJUDICE AND CLEAVAGE.

The earliest historical annals often mention the prejudices and discriminations that one ethnic group, society or sect practised against another. At present, in many parts of the world, certain religious groups and coloured persons are victims of prejudice. The majority groups concerned have exhibited their prejudices by behaviour ranging from silent disapproval to massive exterminations on the scale carried out by Hitler's Nazis.

The determination of the factors causing racial and ethnic prejudice has for many years been the prime concern of a large number of American sociologists and social psychologists. In particular, the problems experienced by the American Negro have received attention. If prejudice could be thoroughly understood, it follows that an effective program might then be implemented to alleviate the existing conditions.

Valid scientific devices had to be developed in order to measure the presence of prejudice, its direction, strength, intensity and rigidity. Foremost among such devices was the attitude scale. The most suitable of these scales (46) are the following:

Thurstone attitude scale (introduced in 1929) - Each person being studied is asked to agree or disagree with each of a number of statements pertaining to the attitude under consideration. Each of the statements has been assigned a scale value derived from the judgments of a large number of experts.

Likert attitude scale (introduced in 1932) - Each person in this case is asked to strongly agree, agree, indicate indecision, disagree, or strongly disagree with statements dealing with the object in question. The five degrees of agreement are assigned the values 1 to 5 and thus a total score can be calculated for each person in the survey.

Guttman attitude scale (introduced in 1941) - This scale requires that the attitude under study be "scalable" for it relies on assigning a prejudice value at the point at which every statement less extreme is endorsed, while all statements more extreme are rejected.

Bogardus Social Distance Scale (introduced in 1925) - The persons in the study are asked if they are willing to accept persons of a specific racial group, at seven different degrees of intimacy - kinship, friends, neighbours, in their own occupation, citizenship, visitor to the country and total exclusion from the country. A variation of this scale is the Social Rejection scale.

Rank ordering and paired comparison methods are also used to establish racial and ethnic preferences. Poll questions, open-end questioning and combinations of the two approaches are used in some instances to establish the nature of an individual's feelings.

Deeper probing of attitudes has met with varying success through ratings from verbal statements, non-verbal behaviour towards the object, secondary expressive cues, personal documents, clinical interviews, projective testing, and immediate experience.

Indirect methods of investigation have been especially necessary for studying changes in attitudes. Projective tests, sociometry



and correlations between attitudes and other known measures have all been used for this purpose.

Allport (2 p.204) believes that all the theories that have been put forward, to date, to explain prejudice, derive from some one, or a combination of a six major theoretical approaches. These approaches, working from the most remote in time and least specifiable in operation, are:

1. Historical - This is the most general of all the classifications, for it includes all explanations that utilize the past in order to explain today's prejudices. P. W. Massing's Rehearsal for Destruction (59) contends that Hitler's rise and genocide policies, can be understood only by an historical tracing of events.

2. Sociocultural - Here the total social environment in which prejudice develops is studied. Socioeconomic, urban, rural, community and class beliefs, all historically derived, are included under this approach. A. Rose (73 ch.49) uses this approach to explain anti-Semitism in the big city.

3. Situational - Theories reflecting this approach take into account all of the current forces, such as: necessity to conform, employment situation, social mobility, density of minority groups and type of contact with them, acting upon the individual. L. Smith's Killers of the Dream (78) utilizes this approach when it explains the Southern White's prejudice as the product of learning the need to conform when he was a child.

4. Psychodynamics - These theoretical approaches stress factors

in human nature. Chief among them are the frustration-aggressive hypothesis and theories concerning the personality structure of the prejudiced individual. Social scientists often use Boston's 1942 Coconut Grove fire, (83) which prompted the public to successively blame the bus-boy, the "unknown prankster", the fire commissioner, police commissioner and fire inspector, to illustrate the frustration-aggression hypothesis.

5. Phenomenological - Theorists adopting this approach attempt to understand prejudice through the eyes of the prejudiced individual. This clinical approach, which is nearly always combined with others, must "make a detailed and specific analysis of the need structure of the particular person concerned. (or) .... deal only with general classes of demand and needs." (46 p.447) when concerned with large groups.

6. Stimulus object itself - Theories that embody this approach stress the importance, as causal factors, of observed undesirable qualities of the victims of prejudice. Such explanations, often known as "well-deserved reputation" theories, would utilize, for example, the fact that many Negroes are actually slum-dwelling persons. Many contemporary social scientists, such as Zawadshi (90) and Ichheiser(38) point out that minority groups are often not blameless, but that their plight is not helped by stereotypes, traditions, and scapegoating.

The tendency of most contemporary social scientists is to stress a multiplicity of causal factors underlying the creating of prejudice.

Although a mass of literature dealing with race prejudice and relations has appeared over the years, only a few works have become classics in the field.

The most comprehensive of all is Gordon W. Allport's The Nature of Prejudice (2). In this work, Allport has produced a thorough and penetrating study of prejudice by calling upon the theories and experimental studies of many psychologists, sociologists, social workers and anthropologists.

Adorno et al's The Authoritarian Personality (1) is a massive study seeking, through the use of many scientific methods, to delve into the personality of the prejudiced person. Intensive clinical interviews were found to be the most useful tools. The anti-democratic or authoritarian personality was exposed as being the most prejudiced.

Rose and Rose's American Divided (74) deals with the position of the various minority groups in American life. The history, present problems and situations of all the major American minority groups are discussed by the authors.

Gunnar Myrdal (65) has produced an objective study of the Negro problem, in his An American Dilemma. Dr. Myrdal, a Swedish economist, was brought to America specifically to undertake the investigation. His penetrating work is one of the few undertaken in America by an outsider.

#### The North American Indian: A Minority Group

The vast majority of studies pertaining to North American Indians has been of a sociological or anthropological nature, studies of child rearing, habits, family structure, tribal customs and anatomical characteristics of various Indian tribes.

However, only a few studies have dealt with the relationship of White and Indian.

E. S. Bogardus (5) using his Social Distance scale, included the American Indian in several of his studies. In one study, 110 Pacific Coast businessmen and teachers were asked to rate 23 ethnic groups by the Bogardus Social Distance Scale. These subjects ranked the Indian as the 19th most popular. In a much larger study, Bogardus used 1725 native-born Americans as subjects. They ranked the Indian as 25th among 40 ethnic groups.

Havighurst and Neugarten (35) used a battery composed of Piaget type tests of Moral Judgement, Free Drawings Test, the Emotional Response Test and the Moral Ideology Test to study about a thousand children, six to eighteen years of age, from five Southwestern Indian tribes and one Plains tribe. For the purpose of comparison and contrast they carried out a similar study in typical Midwest communities. They report the common values and aversions, moral attitudes and basic emotional relationships of the children in each of these groups.

Rose and Rose ( 74 p.163) report that although four states prohibit marriage between Indians and Whites, and one prohibits marriage between Indians and Negroes, Indians experience less social discrimination and segregation in the United States than do Negroes and Orientals. They go on to say "...when they (Indians and Mexicans) have learned general American cultural forms, (they) tend to be accepted almost as much as descendants of immigrants from Europe."

However, Marden ( 58 p.332) points out that the attitude towards Indians ranges from that of the "noble savage" to that of the "savage beast". Often Whites consider them to be "lazy, dirty, immoral drunks".

Even the well-educated Indian, who attempts to live in the White man's world encounters remarks such as "Educated Indians are neither fish nor fowl. They give me the creeps". Marden goes on to say "In the case of those Indians either working off the reservations or residing in white communities, discrimination against them as Indians, aggravates still further personality maladjustments." (58 p.341). Therefore, the Indian tends to remain Indian socially and culturally, making little or no effort to "pass" into the majority society.

### The Canadian Indian

Dallyn and Earle used a Likert type scale, composed of sixteen items, to evaluate intensity and direction of attitudes towards Indians and people of Indian descent. The studies were carried out in three Manitoba towns, Selkirk (21), Portage la Prairie (22), and The Pas (23). In each of the studies, prejudice was found to exist to some degree. Especially prominent were stereotypes concerning the dirtiness, laziness, irresponsibility and lack of skills of Indians. However, there was a general willingness to allow the Indian equal education and job opportunities, and to admit the Indian's ability to progress in school.

All three studies indicate that the educational level of the non-Indian population influenced the amount of prejudice towards Indians. Persons with only elementary school education objected to their children playing with Indians, to having Indians at a party, to hiring Indians as teachers. These objections decreased as the education level increased, until no objections of this sort were shown by university graduates. Persons who have to complete economically

with Indians are reported by the authors to exhibit the most prejudice.

With the exception of The Pas study (23) that showed some contradictory results, the amount of contact with Indians was observed to have little effect on the amount of prejudice. Little or no contact was associated with approximately the same amount of prejudice as close contact.

These three studies, the only ones that come close to the present study are well summarized by the authors with (22 p.22):

"The conclusion is that there is not a wide-spread incidence of extreme prejudice towards Indians and persons of Indian descent, but, enough prejudice exists in significant areas of contact that its effect will be felt by the Indians. The persons he is most likely to work with and have social contact with in the urban centre, are the people who seem to be more highly prejudiced towards him.

.... It may also be concluded that more education makes people more tolerant of the Indian's need to be accepted and recognized in the community."

Due to the scarcity of scientific studies of prejudice against Indians, it is necessary to survey the American studies of anti-Negro and anti-Semitic feeling. In the following section, some of these investigations of factors influencing prejudice towards minorities are discussed.

#### Age Changes in Race Awareness

Awareness of, and prejudice towards, other races seem to develop to various degrees in different cultures with the maturation and socialization of the individual.

Criswell (18) in a large sociometric study of Negro and White classrooms in New York City reports self-preference in Whites from kindergarten onwards. The Negroes did not show a self-preference until grade five. Young minority group children often gave choices to very popular majority group members. But by grade six, both majority and minority groups showed preference for their own members.

In one study (31) Goodman reports that Negro preschool children prefer White dolls, people and fictional heroes, while her study of 100 four-year-old nursery children (32) reveals that the Negro children were much more sensitive to race than were White children. This awareness of racial differences is reported to increase in older and brighter children.

Allport (2 ch.18) believes that the young child, at first, is just curious about racial differences. He cites examples of children verbalizing prejudices against Negroes and Japanese when they themselves are of these racial origins. Later, as they straighten out the facts, they find that by keeping to their own racial and ethnic group they are assured of friends. They therefore have no need to learn new habits of social intercourse.

Lambert and Taguchi (47) contend that racial and ethnic prejudice is exhibited in even quite young children. They used a sociometric variation, utilizing the giving away of candy and having one's picture taken with another, in order to get very meaningful criteria for pre-school children. They report significant cleavage between Oriental and Accidental children under these conditions.

At the high school level, several studies report quite pronounced cleavages between races. Loomis (52) reports cleavages between American and Spanish-American high school students in the Southwest. Lundberg and Dickson (53) found greater self-preference among Jewish high school students than among Protestant or Roman Catholic students.

Mann (57) studied college and adult groups through the use of the sociometric technique. He found that graduate students, both Negro and White, tend to prefer their own race. Older White graduate students exhibit greater self-preference than do older Negro graduates. These same Whites appear to be more aware of the element of prejudice embodied in their self-preferences than do the Negroes. However, with regard to the degree of awareness of the other group's tendency toward self-preference, the author notes that Negroes seem superior.

It would appear that, as age increases, minority group members tend to bank together. They can live their lives together, ignoring to some extent their rejection by the majority. There is safety in the in-group and from this develops a prejudice in favour of their own group.

#### Self-preferences of Boys and of Girls

The Criswell study (18 p.80) provides one of the best analyses of the racial preferences of boys and of girls. She concludes that "Girls accept small minorities more readily than large minorities, while conversely boys more easily adjust to large minorities than to small ones."



### Influence of Concentration of Minority Groups

Williams (86 p.57) stated the following sociocultural law: "Migration of a visibly different group into a given area increases the likelihood of conflict; the probability of conflict is the greater (a) the larger the ratio of the incoming minority to the resident population and (b) the more rapid the influx". This hypothesis has been shown to hold up in general. For example, introduce one Negro, Jewish or immigrant child into a classroom and he will likely become the pet of the classroom. But increase the number of these children and they will likely be considered by the majority group as a threat. In some cases they become the group's scapegoats.

Usually, there is greater intensity of prejudiced feeling as the minority density increases. However, the rate of increase is found to be just as important as the ratio per se of minority members. Boston's 1832 Broad Street Riot was precipitated by a very rapid influx of Irish immigrants, the 1943 Detroit riot by the invasion of Negro war production workers, and the 1943 Los Angeles zoot-suit riot by the arrival of Mexican labourers. The greatest unrest in Chicago has occurred in densely populated Negro areas (90,000 persons per square mile in one area). Rapid influx of Puerto Ricans, Cubans, or Negroes into New York has periodically started trouble in that city.

Weaver (84) points out that individual Negro families have been accepted when they entered upper or middle income residential areas. However, most minority groups tend to congregate in one area, making for less communication with the majority group. When

the minority group is visibly identifiable, this tendency to congregate is increased.

These studies, while not postulating the factors of density of minority concentration as direct causes of prejudice, suggest that they often affect existing prejudices.

#### The Effect of Contact on Racial Prejudice

Studies investigating the effect of contact between persons of different racial and ethnic groups have revealed that the deciding factor in determining whether prejudice will be reduced is not the amount of contact, nor contact per se, but the nature of the contact.

Casual contact has generally been found to increase prejudice. This is easily explained by the fact that with casual contact one perceives only those signs that tend to confirm established stereotypes. Enduring and effective communication does not come about by casual contact.

F. T. Smith (77) was one of the first to investigate the effect of contact on attitudes towards minority groups. Forty-six graduate students in education visited prominent Negroes in Harlem on two consecutive weekends. Smith reports a marked improvement in attitudes towards Negroes registered by these graduate students. He further reports that this improvement had persisted upon retesting a year later.

Stouffer's studies (79 vol. II p.570) of the United States Army of Occupation in Germany point out that with greater personal contact the Americans had more favourable attitudes towards Germans.

An investigation by Kramer (45) of the attitudes of White persons living at varying distances from the Negro community revealed attitudes varying considerably in content. He reports that close to the Negro community there was less stereotyping on the subject of the uncleanliness, smell, and disease of the Negroes, but much more concern about social mixing, White and Negro children playing together, and intermarriage than there was in communities situated further from the Negro community.

White persons in the Deutsch and Collins study (25 p.82) who lived in integrated housing units perceived fewer differences between Whites and Negroes than did those living in segregated housing units.

B. K. MacKenzie's study (56) of the effect of contact on prejudice testifies to the importance of underlying economic factors. He found that Whites exhibited less prejudice towards skilled and professional Negroes than towards unskilled Negro labourers.

The very vigorous antidiscrimination policy of the National Maritime Union has resulted in much more favourable attitudes of White seamen towards their Negro shipmates (46 p.514-515).

During World War II, White American soldiers displayed more favourable attitudes towards Negroes when in close combat association with them, than when in segregated combat units. Stouffer's account The American Soldier cites several examples of this (79 Vol. I CH.10).

Works (87) in a study from the point of view of the Negro minority, concludes that integrated housing also helps to diminish anti-White feeling in the Negro.

Yarrow et al (88) studied a two-week integrated children's camp. They report that the children selected both White and Negro children as desirable friends by the end of the camping period.

One can sum up the effect of contact on prejudice by citing Allport (2 p.264) - "Only the type of contact that leads people to do things together is likely to result in changed attitudes".

#### Critique of Previous Investigations

The preceding review of the literature dealing with racial and ethnic prejudice has shown the scarcity of research investigating prejudice towards Indian and Metis. Studies of the effects of contact, age, sex, concentration and personality, on prejudiced attitudes and practices have been concerned primarily with anti-Semitism and anti-Negro feeling.

No studies which have attempted to investigate groups comprised of both Canadian Indians and White Canadians were located. The present study will attempt to examine a cross section (in terms of age, sex and minority concentration) of such groups. Through the use of the sociometric technique, it is hoped that meaningful interpersonal relations between Indian and White members will be revealed.

## CHAPTER II

### THE INVESTIGATION: MATERIAL, SUBJECTS AND PROCEDURE

#### I. THE PROBLEM

The previous discussion revealed that research dealing with the relations between Whites and Canadian Indians and Metis is almost non-existent. This scarcity of scientific data coupled with recent interracial disputes prompted the execution of this study. Its aim is to investigate the extent to which age and minority concentration affect racial cleavage in Indian - White groups. The sociometric technique will be used to measure the cleavages, if any, that exist in Indian - White groups.

#### II. THE NORTH AMERICAN INDIAN

The American Indian is the aboriginal race of the Americas. Anthropologists classify both the Americal Indians and the Eskimos as Arctic Mongol racial groups (subraces of the Mongoloid race) (36 p.64). When Columbus arrived in America, it is believed that most of the American Indians were living in Stone Age cultures. The most advanced tribes at that time were located in Central America and the middle Andean country of South America. Those living in territory now constituting Canada and the United States were much more primitive.

Most modern anthropologists recognize nine cultural groups among the North American Indians. These groups are classified with respect to rather generalized geographical areas and to typical customs and habits. The nine cultural groups are the Plains, Eastern Woodland, Southeastern, Southwest, California, North Pacific Coast, Mackenzie and Arctic.

### The Canadian Indian

In Canada six of the nine cultural groups are represented.

These tribes are as follows:

1. Plains: Blackfoot (Blackfoot, Piegan and Blood), Sarcee, Assiniboine (Stonies) and a branch of Cree.
2. Eastern Woodlands: the migratory Micmaes, Maleciti, Montagnais, Naskapi, Algonkins, Ojibwa, Cree and the extinct Beothuk and the agricultural Iroquois (Seneca, Oneida, Onondaga, Cayuga and Mohawk), Hurons and the extinct Tobaccos and Neutrals.
3. Pacific Coast: Tlinkit, Tsimshian, Haida, Bella Coola, Kwakiutl, Nootka and Salishan.
4. Cordillera (Plateau): Salishan, Kootenay, Chilcotin, Carriers, Tsetsaut, Tahltan and Tagish.
5. Mackenzie and Yukon River Basins: Sekani, Beaver, Chipewyan, Yellowknives, Dogribs, Slaves, Hare, Nakani and Kutchin.
6. Arctic: Eskimos on the shores of the Arctic Ocean, Hudson Bay and Labrador peninsula.

As of March 31, 1960 Canadian Indians (excluding Eskimos) numbered over 180,000 persons. They were grouped into 562 bands on 2,217 reserves and occupied 6,022,795 acres of land (26). Of Canada's eighteen million persons, this once dying race is now the country's fastest growing ethnic group.

The Canadian Government's treatment of the Indian has been entirely different from that meted out to their Indians by any other North or South American government. Collier says of Canada -

"But it means much that there is one Commonwealth in the Western world - there is only one - which from beginning to end has shown moral integrity in dealing with Indians and has kept the faith." (14 p.176). Collier points out that Canada has respected the Indian landholdings, made fair treaties and never broken them, and has developed a flexible Canadian Indian law which is known for its fairness and common sense. The tribes were never turned one against another, nor were they oppressed by military forces. Land allotments were never forced upon Indians, band funds were not appropriated nor diverted, nor was corruption tolerated in the Indian Affairs Branch. The Canadian picture is even more remarkable when one considers that south of the Canadian border, during the 1870's and 1880's, branches of the same tribes were locked in bloody battle with the United States Army after having been victimized by the American Government.

On May 26th, 1874, the Canadian Government passed An Act providing for the organization of the Department of the Secretary of State of Canada, and for the Management of Indian and Ordnance Lands, which became Chapter 42 of the Statutes of 1868. At this time the Indian was given land and many of the privileges that he still enjoys. In 1951, An Act Respecting Indians (commonly known as the Indian Act) became Chapter 149 of the 1868 statutes. This act carefully delineated the Canadian Indian's position and rights. The two acts can be summarized as follows: all band members were to be joint owners of their land; the reserves were to have schools, health projects, medical treatment, roads, bridges, etc; the Indian,

his wife and family were to have most of the usual rights of a Canadian citizen; bands could make loans in order to finance the purchase of livestock, seed, vehicles, farm machinery, cooperative projects, etc., and instruction was to be provided for any of these enterprises.

The Indian Act also outlines the manner in which the bands govern themselves. Each band was to elect a chief and also one councillor for each 100 band members. There was to be a minimum of two councillors and a maximum of twelve. All officials were to serve two year terms. Any by-law that was not inconsistent with the Indian Act could be passed by these Councils.

Family Allowances, Old Age Security, Old Age Assistance, Blind Persons' Allowances, Disabled Persons' Allowances and other social welfare assistance plans were all made available to Canadian Indians.

Up until quite recently liquor was forbidden on the reserves. However, each reserve is now like any other community in this respect - it may call for a referendum to express its wishes on the liquor question.

The final right given to the Canadian Indian was the enfranchisement. This 1960 Legislation gave the franchise to all Indian adults. The first to exercise their new privilege were those of the Hiawatha Reserve at Rice Lake, Ontario, when they voted in an Ontario federal by-election on October 31, 1960. All adult Canadian Indians have the privilege of casting their ballots for the first time in a federal election on June 18th, 1962.



Several Indians have become well-known Canadian figures.

Among these are the valiant warrior chief Joseph Brant; Peguis, the Saulteaux chief who made the land treaty with Lord Selkirk; Crowfoot, the Blackfoot chief who kept the peace on the prairies; the poetess Pauline Johnson; the great Indian athlete, Tom Longboat, and the Honorable James Gladstone, the first and only Treaty Indian to be appointed, to date, to the Canadian Senate.

#### The Indians of Manitoba

The Indian Affairs Branch of the federal government which has its Manitoba Regional Office in Winnipeg has eight Indian Agencies located throughout the province. Within the Branch's jurisdiction are slightly more than 24,000 Manitoban Indian persons (23,658 as of December 31, 1959.) (11). These people are grouped in fifty bands on 107 reserves and occupy 524,241.11 acres of land. (11). There are also many other persons of mixed (Indian and White) blood. These persons, known as half-breeds or Metis are not included in the above total, nor do they usually enjoy the privileges and rights of treaty Indians.

The bands in the northern and north-western parts of the province are from the Chipewyan tribe. The widespread Cree tribe occupies a huge wedge of forest-covered land that commences along the full extent of the Manitoba-Ontario border, sweeps across central Manitoba and terminates in the Flin Flon - The Pas area. A few of the Ojibwa tribe occupy the southeastern portion of the province. The Assiniboine tribe ranges over the prairie sections of Manitoba. A small pocket of Pipestone Sioux, for the most part a United States tribe,

is found in the extreme south-west corner of Manitoba. This is the <sup>24</sup> geographic distribution of Manitoban Indian bands (40).

Many of Manitoba's Indians still follow the traditional occupations of hunting, trapping and fishing. This is especially true in the forest lands of eastern and northern Manitoba. In some of the new northern inland lake commercial fishing areas, fish filleting plants have been established by the Indians. In some areas, the harvesting of seneca root, frogs, and wild rice, the selling of handicrafts, the guiding of fishing and hunting parties, and other minor traditional occupations supplement the incomes of the bands.

Many Indians are also engaged in non-traditional occupations. These include mining, logging, microwave construction; pipe line work, hydro construction and seasonal occupations such as sugar beet harvesting, road construction, and land clearing. In a few areas of Manitoba, bands have embarked upon agriculture and stock raising. At present 152 Indians farm their own holdings (11). Livestock raising is becoming increasingly more popular among Manitoba bands. The Civil Service also hires Indians as fire wardens, guides, and Indian and Northern Health Services employees.

Living standards are being improved on most reserves. This is being accomplished by the provision of new and multiple-roomed houses, better sanitary facilities, sewage disposals, water supplies, bridges, roads, and schools. There is also a growing participation by the Indians in solving their own community problems. One of the most remarkable achievements is the very successful cooperative store at Norway House. Half the shareholders and directors of this venture are Indians.

In addition to supplying welfare assistance, many agencies are participating in the provision of community leadership training programs. The famous community action program of St. Francis Xavier University (91) has been closely followed by a number of bands. Adult Education courses in such areas as child care, home-making, carpentry, various trades, handicrafts, and literature have proven their worth. Most bands have formed their own Homemaker's Clubs, 4-H Clubs, young people's groups, health and welfare action committees, and children's clubs.

In Winnipeg, the Community Development Services, the Canadian Council of Christians and Jews, Indian and Metis Friendship Center, Welfare Council and churches assist Manitoban Indians in entering urban life.

Educational facilities are made available to the Indians in accordance with the Indian Act - Indian schools are established, operated, and maintained by the Department of Citizenship and Immigration, provincial governments, local public school boards or religious groups. These schools are provided with buildings, all standard classroom supplies, texts, references, teaching aids, library facilities, residences, sports equipment, transportation and many other educational facilities. All Indian children from 7 to 16 years of age are required to attend school.

Indian day and residential schools have the same curriculum as other public schools in the same province. In addition, they have special athletic, interest and club groups - 4-H, Scouts, Guides, Junior Red Cross, hockey, and basketball. Special guidance

programs are provided for the teachers, principals, supervisors and other staff members.

In 1957, the band councils were empowered by the Department of Citizenship and Immigration to appoint school committees to advise and assist the local school and school board. This liason helps the school to meet specific needs of the individual Indian and band.

The Indian Affairs Branch will provide for the Indian's education, even to the extent of a university education for hard working, capable students. Noreover, each year forty scholarships are made available to outstanding Canadian Indian students. Young people with low academic standing, who are not in a position to follow the traditional pursuits, are now being provided with rehabilitation training. In Manitoba, the Sanatorium Board assists in the rehabilitation of physically handicapped Indians.

A program of integrating Indian children into public schools was introduced several years ago in Manitoba. This integration program is being expanded each year. Even high schools in certain parts of the province now have quite high enrolments of Indian students.

More qualified Indian students are now entering high school, professional and vocational training schools. The number of dropouts is steadily decreasing.

Improved facilities, winter transportation and greater parental interest are bringing about this change.

In Manitoba, there are 89 government-owned Indian Schools and 11 residential schools. As of January 1, 1960, there were 1,435 Indian pupils in Manitoba residential schools, 480 in provincial, private and territorial schools and 212 residential school boarders in non-Indian schools. (11).

### III. THE TEST: THE SOCIOMETRIC TECHNIQUE

#### The Nature and Purpose of the Test

The sociometric technique was introduced by J. L. Morneo in Who Shall Survive? (61) in 1934. According to Northway (68) "A Sociometric test is a means for determining the degree to which individuals are accepted in a group, for discovering the relationships which exist among these individuals, and for disclosing the structure of the group itself."

The test constitutes asking each member of a group, which other members of the group he would like to have join him in a certain activity. From the answers received, the total number of choices received is calculated for each individual, giving him his "sociometric status" score, or "choice-status" or "social acceptance" score.

His "social receptiveness" score is constituted of the number of different individuals who have chosen him. For many studies it is quite important to note the particular individuals constituting the "social receptiveness" score for the individual in question.

His "emotional expansion" score is constituted of the number of different individuals who he has chosen.

The sociometric questions asked are always stated in the conditional case, enquiring, "if all things were possible and if you had absolutely free choice, with whom would you wish to participate?"

The areas for participation, the so-called "criteria", must be chosen by the investigator so that they are suitable and meaningful to the particular group being investigated.

Since its introduction, sociometry has often been used to study groups for cleavages along minority groups lines. In some ways, it has proven to be more valuable than questionnaires and surveys in studying prejudice. Lindzey and Borgatta (51 p. 426) explain, as follows, its value for this purpose:

"Where the sociometric technique is administered to groups containing appreciable numbers of one or more minority groups, a much more direct and satisfactory measure of prejudice can be obtained. Various ratios or indices representing the relative choice by each individual of minority and majority group members can be obtained. Such a measure possesses obvious advantages because it gets away from the abstract, class notion of the minority group member. Instead of asking the respondent to verbalize his attitudes toward the Protestant, Jew, Catholic or Negro, he is asked to select those individuals with whom he would like to associate in various activities, and perhaps those with whom he would not like to associate. A measure based on this kind of evidence represents not the subject's generalization concerning his relations with minority group members, when they have been identified as minority group members, but rather an indication of whether this person actually uses minority labels as criteria in the process of determining with whom he will interact."

#### Reliability of the Sociometric Test.

The term reliability, in the sense of consistency of test

results, can not be applied as directly to sociometric measures as it can to intelligence tests, aptitude tests and interest inventories. Lindzey and Borgatta (51 p. 420-422) point out that the sociometric test would be inadequate if it did not indicate variation due to actual changes in group structure and to the passage of time. As human groups are constantly changing, a test which showed great consistency over time, would actually be revealing its own insensitivity. It is therefore very important when reporting sociometric reliabilities, to specify the nature of the group, the questions used, the number of choices allowed and the test-retest period.

In spite of these problems, many reliability studies have been carried out. These studies have provided us with certain generalizations on the reliability of sociometric measures.

Mouton, Blake and Fruchter (62) analyzed 53 different studies dealing with the reliability of sociometric measures either given or received. These test-retest studies with various sized groups utilized time intervals between test and retest of one day to one year. The reported correlation coefficients, ranging from .50 to .95, suggest that group members are capable of making consistent sociometric choices; but these investigators note that the degree of reliability of the choices is influenced by certain factors. For example, they found evidence that the more relevant the criteria were to the group, the more consistent the sociometric choices. Moreover, the choices were found to be more stable in the case of adults than with children. The retest correlation increased as the degree of acquaintance between the subjects increased. Greater consistency in the measures also was found when more choices were to be made. Lastly,

the retest correlation became lower as the time interval between test and retest increased.

### Validity of the Sociometric Test

Lindzey and Borgatta (51 p.422-424) point out that with sociometric devices, the testing of validity - "whether the test measures what it purports to measure" - is fraught with difficulty. If the test claims to measure no more than verbal choice behaviour, then no demonstration of validity is required. Moreover, differences between choice behaviour as revealed by sociometry and overt choice behaviour do not necessarily prove that one measure is invalid.

In order to make sociometric responses most valid, it has been emphasized by Moreno (61) and others that the criteria used must be meaningful to the individuals and if at all possible restructuring of the group must follow the sociometric test. Careful consideration of these factors has resulted in studies that have shown moderately high correlations between sociometric choices and overt behaviour.

In evaluating the validity of sociometric studies, Mouton et al (63) examined 34 industrial, military and educational situations validity studies. Evaluations against a criterion measure were made either for individual members of the group or for the group on a "team basis". They found that sociometric studies were able to predict the performance criteria of morale, cooperation, cohesiveness, productivity, leadership and combat effectiveness. It is this "predictive validity" that has proven sociometry's worth as a research tool.



#### IV. THE SUBJECTS

The subjects used in this investigation were 682 students from twenty classrooms in various public schools of the Portage la Prairie, Rossburn, Elphinstone, and Erickson districts of Manitoba. The classrooms tested were drawn from grades 2, 4, 6, 8, 10. Each of these levels was represented by four groups differing in degree of minority concentrations as follows: (a) 1 or 2, (b) 3 or 4, (c) 5 to 7, (d) 8 or more Indian and Metis members in an average classroom of thirty to forty students.

The primary and elementary classrooms were from the Rossburn, Elphinstone and Erickson schools. The Indian children live on nearby reserves and are brought by bus or car to school each day. Several of these children are believed by school officials to be Metis (of mixed blood). For the purposes of this study they were classified as Indian. The White children came from nearby farms or from homes in the towns that service the surrounding agricultural areas.

The junior and senior high school classrooms were drawn from the Portage la Prairie schools. The Indian students come from various reserves in the province and during the school year reside in the Portage la Prairie Residential School. Some of these children board in White homes due to the shortage of bed space in the Residential School. A few of the Indian children live on a nearby reserve. Many of the White children come from the surrounding grain and dairy farms. The remaining White children come from Portage la Prairie, the dairy, marketing and manufacturing center for the district.

The test was also administered to additional classrooms of grades 6 to 8 inclusive, in the Portage la Prairie district. The purpose

of this testing was to investigate the interrelationships of White and Indians as a function of the Indian children living in the residential school as opposed to boarding in white homes. During the school year 1961 - 1962 there were 63 students of the above mentioned grades in the residential school and 8 boarding in White homes. Boarding out was necessitated when the enrolment in September, 1961 exceeded the bed space of the Residential School. Children in grades 6, 7, and 8 were randomly assigned to either the residential school or the White homes.

All of the classrooms had been in operation since September, 1961. Thus the members had been together, as a group, for a period of seven months.

The adult subjects were 139 unskilled, semiskilled and skilled male workers in four Manitoba lumber and construction camps. The four groups ranging in size from twenty-five to forty-four, differed in degree of minority concentration as follows: (a) 1 or 2, (b) 3 or 4, (c) 5 to 7) (d) 8 or more Indian and Metis members.

The White workers came primarily from the larger towns and cities of the more densely populated areas of Canada. Many of the unskilled White workers were very recent immigrants to Canada. The majority of Whites considered their jobs to be somewhat temporary, and hoped to find employment further south in the future. The Indians and Metis in the groups usually came from the bands close to the work project.

Accurate records of the educational level of the workers were not available. However, casual conversations and discussions revealed educational levels ranging from no formal education to high school education or the completion of tradesmen's courses. The three

groups with the largest concentrations of minority group members were all composed of unskilled, semi-skilled and skilled workmen. The group with only two Indians in it was composed of skilled workmen and tradesmen, a few semi-skilled workers, and no unskilled laborers.

Although there is always some changing of personnel in these work groups, most of the men in these four groups had been working together on the same project since the onset of winter (November, 1961). Thus, most of the members had been together, as a group, for about six months.

Table I below summarizes the average ages and numbers of White and Indian subjects at each grade level.

TABLE I  
AVERAGE AGE (IN YEARS) AND NUMBER OF SUBJECTS BY GRADES

Grades	2		4		6		8		10		Adult	
	Age	N	Age	N	Age	N	Age	N	Age	N	Age	N
Whites	7.9	109	9.4	111	11.6	105	13.9	121	15.8	126	#	113
Indians	8.6	24	10.9	22	13.4	23	16.2	23	17.2	18	#	26

# figures not available

#### V. THE PROCEDURE

The procedure used in this study was the sociometric test as described by Moreno (6) and Northway (68). The criteria used were two in number - "If you had your choice of all the boys and girls in this class, whom would you like to have sit near you?" and "If you had your choice of all the boys and girls in this class, whom would you like to

have work with you on a class project?" Three choices were allowed for each criterion.

In order to establish the greatest degree of rapport and to help make the criteria most meaningful to the subjects, it was decided that the class teachers should administer the test to their own groups. However, all scoring and drawing of target sociograms were carried out by the author.

The test was administered in group form to each of the classes of children. The teachers of each of the experimental classes were interviewed by the writer before the administration of the tests. Each teacher was provided with a class list blank, forty-five blank test sheets and a sheet of instructions. The author went over the instructions point by point, answered teachers' questions and clarified any ambiguities. Any modifications needed to ensure the meaningfulness of the questions to children of different ages were discussed and approved by the author. Teachers were encouraged by the author to restructure their classrooms if at all possible, according to their students' choices, but no promises of actual change were made to the students by the teachers. Restructuring of seating arrangements would have been impossible to carry out in some classrooms because of seating according to academic achievement, special facilities for handicapped children, special desks for left-handers and similar factors. It was assumed that the intrinsic interest of the sociometric questions would elicit valid responses from the subjects.

The instructions as given to the teachers were as follows:

TEACHER'S INSTRUCTIONS

1. You should have 1 Teacher's Instruction sheet, 1 Class List blank and 45 test blanks, all enclosed in a brown paper envelope.
2. Please read the following instructions carefully.
3. On the Class List blank, fill in the grade of your class. Then list the full name and age of each child in your class. If the child is either Indian or Metis, put a (✓) mark beside his name under the column headed I/M.
4. TO ADMINISTER THE TEST. Pass out one test blank to each child in your class. Then instruct as follows:

\*Write your name in the proper space at the top of the page.

This is not a test, but we would like to know with whom you would like to do certain things at school.

1. Now, if you had your choice of all the boys and girls in this class whom would you like to have sit near you?

Name three people.

Decide by yourself and do not point or talk while you are thinking. When you have decided write the three names in the spaces below \*SIT NEAR ME\*.

2. If you had your choice of all the boys and girls in this class, whom would you like to have work with you on a class project? Name three people.

Decide by yourself and do not point or talk while you are thinking. When you have decided write the three names in the spaces below \*WORK WITH ME\*.

In reading the instructions be informal and use your own discretion in modifying the wording so as to be appropriate for your class' age and understanding.

The children may ask if they can choose children in another classroom. NO, they can not, only children in their own room may be chosen.

After all children have finished, collect all of the sheets.

5. Enclose all test sheets, the class list in the brown envelope and return it to the principal.
6. If some children are absent when the test is administered, keep the instruction sheet and enough test blanks for each absentee. As soon as these children return to school administer the test to them. Then return these completed test sheets to the principal also.
7. Thank you very much for your cooperation in this project.

Absentees were dealt with as outlined in No. 6 in the above instructions.

The procedure used for the adult group was the same as for the children with the following exceptions. The criteria, again two in number, were - "If you had your choice of all the men in this work group, whom would you like to have share a room with you?" and "If you had your choice of all the men in this work group, whom would you like to have work with you on your daily job?" Three choices were again allowed for each criterion.

In this case the author administered the test to each of the groups. As the groups had to be gathered together in the men's free

time, a small remuneration was paid to each individual for his participation. Those who could not write were assisted by the author or by friends.

There were no absentees in any of the adult groups.

The criteria used for the children's and the adult groups were chosen for their meaningfulness to individuals in the groups. Both adults and children were asked with whom they would like to work and with whom they would like to associate on a basis of even greater proximity - sharing a room or sitting near.

## CHAPTER III

### THE RESULTS AND DISCUSSION OF RESULTS

Target sociograms for each group, student and adult, along with the various self-preference ratios and other pertinent information on each group, are presented in Appendix "A".

The total, first and second criteria, and the male and female sums for each student group are reported in Appendix "B".

The total, first and second criteria, and the male and female sums for the five student age levels are presented in Appendix "C".

In Appendix "D" are the sums of each of the four student concentration levels.

In Appendix "E" are the sums for each of the four adult groups.

#### I. THE RESULTS

The results of the study will now be presented in two main divisions - first, the effect of age on racial cleavage and secondly, the effect of minority group concentration on racial cleavage. In each of these divisions the self-preference displayed by White and Indian students will be categorized as follows: total, "sit near", "work with", boys', girls', boys' "sit near", boys' "work with", girls' "sit near", and girls' "work with". The self-preferences of the adult groups will be similarly categorized. The chapter will conclude with the results and discussion of the sociometric testing of the grade six to eight Indian children living in residential school and in White homes.

Self-preference ratios (SPR) as devised by Criswell (18 p.21) were calculated for the analysis. This ratio expresses a "given racial group's preference for itself over another racial group" (51 p.416).



For example, a White SPR of 3.25 would indicate that Whites' preference for Whites was 3.25 times as great as their preference for Indians.

Throughout the discussion the following adjectives will be used with reference to various degrees of self-preference:

"statistically insignificant"	-	usually SPR less than 2.00
"Moderate" self-preference	-	SPR = 2.00 to 2.99
"high" self-preference	-	SPR = 3.00 to 4.99
"very high" self-preference	-	SPR = 5.00 to 9.99
"extreme" self-preference	-	SPR = 10.00 and over

In order to establish the probability of the observed self-preference occurring by chance, chi-square tests were applied to each self-preference ratio. Yates's correction for continuity (55 p.230-231) was applied when one or more of the expected frequencies were less than ten.

Summary tables and graphs are provided to supplement the discussion of results.

#### Analysis of the School Classrooms

As shown in Table II, the 682 students in the study exhibited a preference for their own race 2.26 times as great as their preference for the other race. As this preference was statistically dependable ( $P < .001$ ), it is concluded that racial cleavage existed in the sample drawn. The White children expressed a self-preference ratio of 3.77 and the Indian children a ratio of 2.83. Both of these ratios were statistically significant at the .001 level.

TABLE II

TOTAL SELF-PREFERENCE RATIOS OF WHITE AND INDIAN CHILDREN  
(ALL GRADE AND CONCENTRATION LEVELS INCLUDED)

	SPR	$\chi^2$	P
Grand Total	2.26	331.12	.001
Whites	3.77	305.25	.001
Indians	2.83	187.68	.001

White and Indian Boys' and Girls' Self-Preference

In Table III are presented the SPRs, Chi-squares and levels of significance of the White and Indian boys and girls. All four groups exhibited statistically significant ( $p < .001$ ) racial self-preferences. It can be seen that the White girls had the highest self-preference ratio (4.67). White boys and Indian boys had nearly identical self-preference ratios of 3.17 and 3.29, respectively. The lowest self-preference ratio, that of 2.43, was shown by the Indian girls.

TABLE III

WHITE AND INDIAN BOYS' AND GIRLS' SELF-PREFERENCE RATIOS  
(ALL GRADE AND CONCENTRATION LEVELS INCLUDED)

	Whites			Indians		
	SPR	$\chi^2$	p	SPR	$\chi^2$	p
Boys	3.17	129.15	.001	3.29	128.48	.001
Girls	4.67	180.54	.001	2.43	65.13	.001

Age (or Grade Level) Results

Total Self-Preference Ratio Changes as a Function of Grade Level

Self-preference ratios, chi-square values and levels of significance for both Whites and Indians at each of the five grade levels tested are shown in Table IV. These self-preference ratios are plotted in Figure I.

TABLE IV

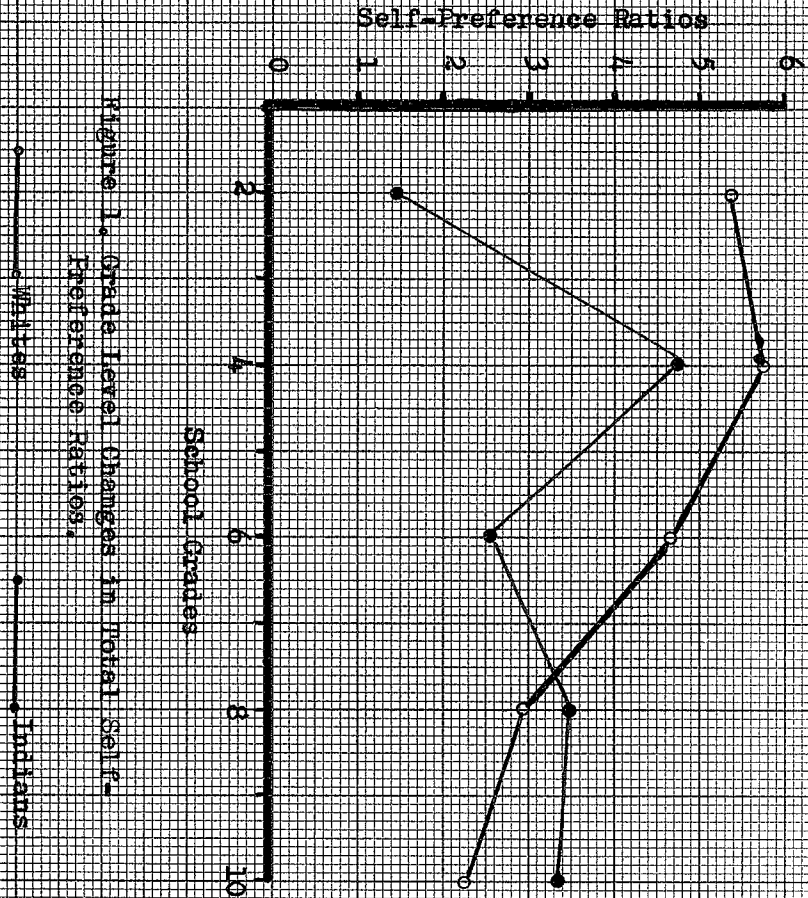
TOTAL RACIAL SELF-PREFERENCE RATIOS  
AS A FUNCTION OF GRADE LEVEL

Grades	Whites			Indians		
	SPR	X <sup>2</sup>	p	SPR	X <sup>2</sup>	p
2	5.39	79.811	.001	1.45	4.261	.05
4	5.77	80.214	.001	4.73	135.837	.001
6	4.67	74.593	.001	2.56	31.699	.001
8	2.93	50.242	.001	3.49	58.773	.001
10	2.28	29.890	.001	3.36	40.628	.001

The White self-preference ratios were ~~dependable~~ at the .001 level at each of the five grade levels. The youngest grades (2 and 4) exhibited the greatest self-preference, but the ratios then progressively decreased to a low of 2.28 at the grade 10 level.

The Indian children, however, showed the opposite trend - that of self-preference increasing with advancing grade level. All self-preference ratios (except grade 2,  $p < .05$ ) were statistically ~~dependable~~ at the .001 level. A gradual increase in the size of the self-preference





ratios was contradicted by the Grade 4 ratio of 4.73, the highest exhibited at any level.

"Sit near" and "work with" Self-preference Ratio changes as a Function of Grade Level.

The total self-preference ratios were broken down into their criteria components - "sit near" and "work with". These ratios and levels of significance are presented in Table V and VI. The graphic representations of these ratios are presented in Figures 2 and 3.

TABLE V  
"SIT NEAR" RACIAL SELF-PREFERENCE RATIOS  
AS A FUNCTION OF GRADE LEVEL

Grades	Whites			Indians		
	SPR	X <sup>2</sup>	p	SPR	X <sup>2</sup>	p
2	7.79	46.212	.001	1.70	4.732	.05
4	5.50	39.161	.001	5.69	62.323	.001
6	8.03	47.975	.001	3.25	26.739	.001
8	2.15	15.928	.001	4.02	38.321	.001
10	1.89	10.143	.01	3.82	24.246	.001

The White children showed very high self-preference ratios in Grades 2, 4 and 6 and much lower ratios in Grades 8 and 10 for the "sit near" criterion. However, except for the Grade 10's SPR of 1.89 ( $p < .01$ ), all of these SPRs were dependable at .001 level.

For this criterion the Indian children showed dependable ( $p < .001$ ) SPRs at all grade levels except grade 2 ( $p < .05$ ). Their SPRs, slowly and irregularly, increased with age.

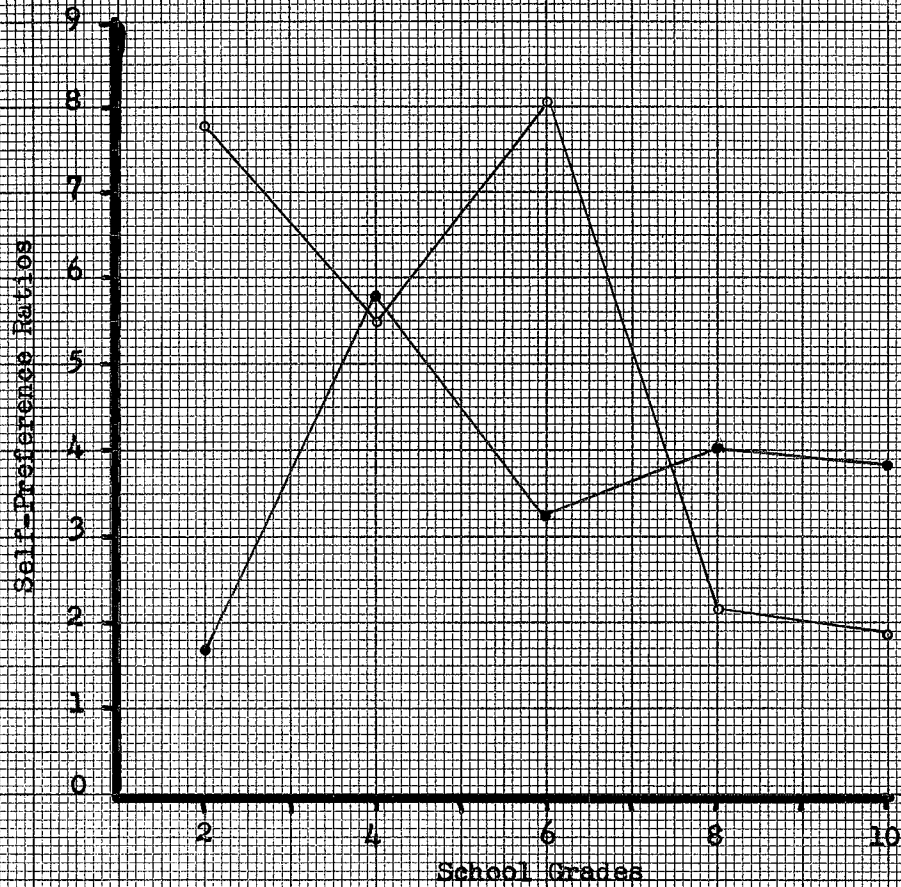


Figure 2. Grade Level Changes in "sit near" Self-Preference Ratios.

Whites Indians

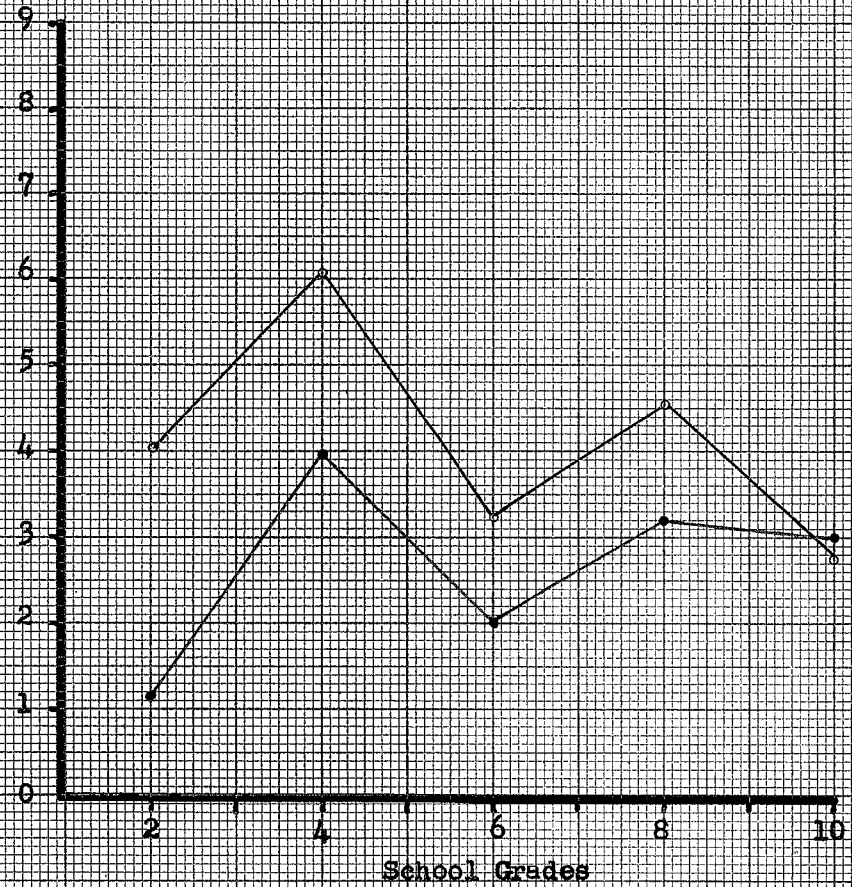


Figure 3. Grade Level Changes in "work with" Self-Preference Ratios.

Whites Indians

TABLE VI  
"WORK WITH" RACIAL SELF-PREFERENCE RATIOS  
AS A FUNCTION OF GRADE LEVEL

Grades	Whites			Indians		
	SPR	X <sup>2</sup>	p	SPR	X <sup>2</sup>	p
2	4.07	33.136	.001	1.15	0.285	- -
4	6.07	41.064	.001	3.95	36.259	.001
6	3.26	27.999	.001	2.00	7.880	.01
8	4.57	37.597	.001	3.23	25.631	.001
10	2.73	18.727	.001	2.99	13.861	.001

At all grade levels the White students showed statistically dependable ( $p < .001$ ) SPRs for the "work with" criterion. These ratios did show a very slight downward trend with age.

On the same criterion, the Indian children showed SPRs significant at .001 level at grades 4, 8 and 10. The grade 2 SPR was statistically insignificant and grade 6 SPR dependable at the .01 level.

The two curves closely parallel each other, (see Figure 3) with the Indians' SPRs being less than the Whites' except at grade 10. In general, the Whites' SPRs showed a slight downward trend and the Indians' SPRs a slight upward trend with age increase.

Boys' and Girls' Self-preference Ratio Changes as a Function of Grade Levels

The total self-preference ratios were broken down into boys' and girls' ratios for each grade level. These ratios and levels of significance

are presented in Tables VII and VIII. The graphic representations of these ratios are presented in Figures 4 and 5.

TABLE VII  
BOYS' RACIAL SELF-PREFERENCE RATIOS  
AS A FUNCTION OF GRADE LEVEL

Grades	Whites			Indians		
	SPR	X <sup>2</sup>	p	SPR	X <sup>2</sup>	p
2	5.68	44.642	.001	2.83	7.632	.01
4	4.43	33.128	.001	3.62	20.694	.001
6	2.90	24.539	.001	3.91	23.621	.001
8	2.37	17.405	.001	4.51	14.194	.001
10	2.23	14.050	.001	4.81	33.214	.001

White boys' ratios were statistically dependable ( $p < .001$ ), at each grade level. Their ratios began with a very high 5.68 at the grade 2 level and decreased with increasing grade level to the lowest ratio of 2.23 for grade 10 boys.

The Indian boys showed the opposite trend - that of increasing SPRs with increased grade level. The grade 2 SPR of 2.83 ( $p < .01$ ) was the lowest shown by Indian boys. From grade 4 on, all SPRs were significant at the .001 level and increased to a high of 4.81 at grade 10.



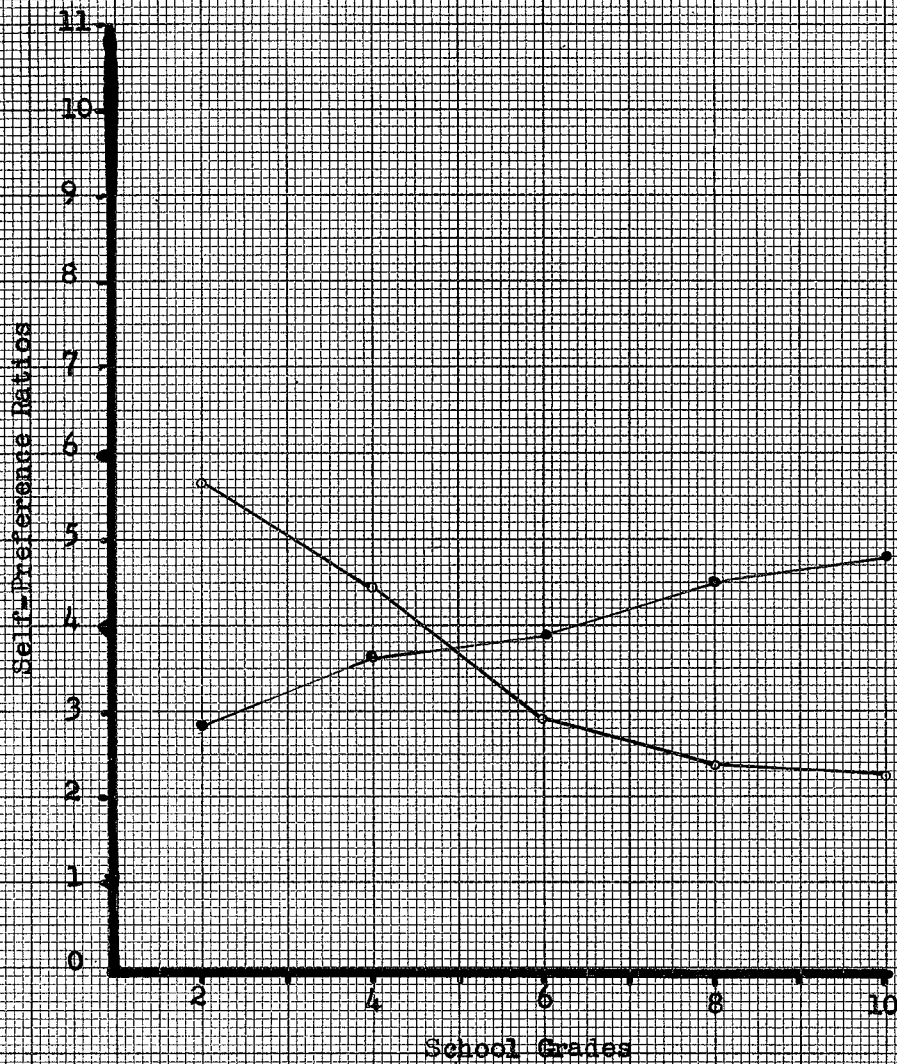


Figure 4. Grade Level Changes in Boys' Self-Preference Ratios.

Whites Indians

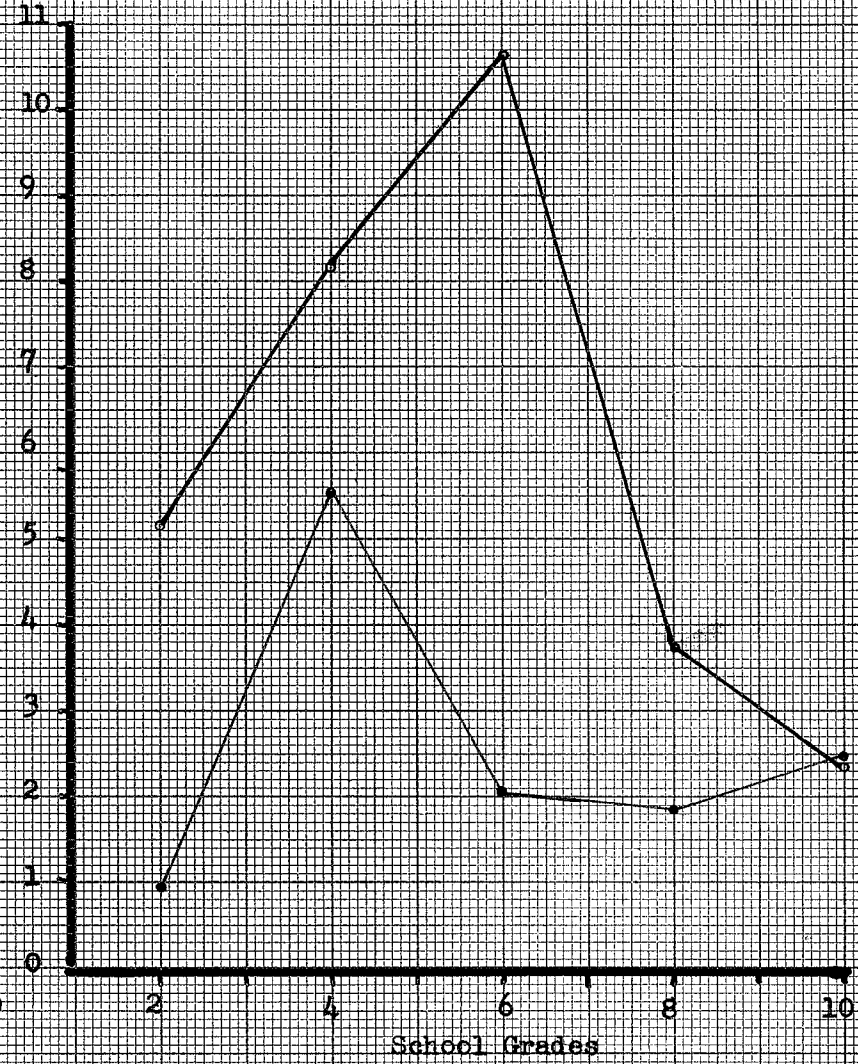


Figure 5. Grade Level Changes in Girls' Self-Preference Ratios.

Whites Indians

TABLE VIII  
 GIRLS' RACIAL SELF-PREFERENCE RATIOS  
 AS A FUNCTION OF GRADE LEVEL

Grades	Whites			Indians		
	SPR	$\chi^2$	p	SPR	$\chi^2$	p
2	5.15	35.482	.001	.93	0.043	--
4	8.16	49.127	.001	5.54	76.003	.001
6	10.66	51.453	.001	2.08	11.982	.001
8	3.75	34.777	.001	1.84	2.924	.10
10	2.35	16.007	.001	2.47	9.031	.01

White girls exhibited high SPRs ( $p < .001$ ) at all grade levels. A very high grade 2 SPR of 5.15 increased to an extremely high SPR of 10.66 at the grade 6 level and then rapidly decreased to 3.75 at grade 8 and 2.35 at grade 10.

The Indian girls showed relatively low SPRs at all levels, except at grade 4. The ratio was insignificant at grade 2, high (SPR 5.54,  $p < .001$ ) at grade 4, and between 1.84 and 2.47 at the three most advanced grade levels.

Boys' "Sit near" and "Work with" Self-preference Ratio Changes as a Function of Grade Levels.

The boys' choices were broken down into their criteria components - "sit near" and "work with", at each grade level. Their ratios and levels of significance are presented in Tables IX and X. The graphic representations of these ratios are presented in Figures 6 and 7.

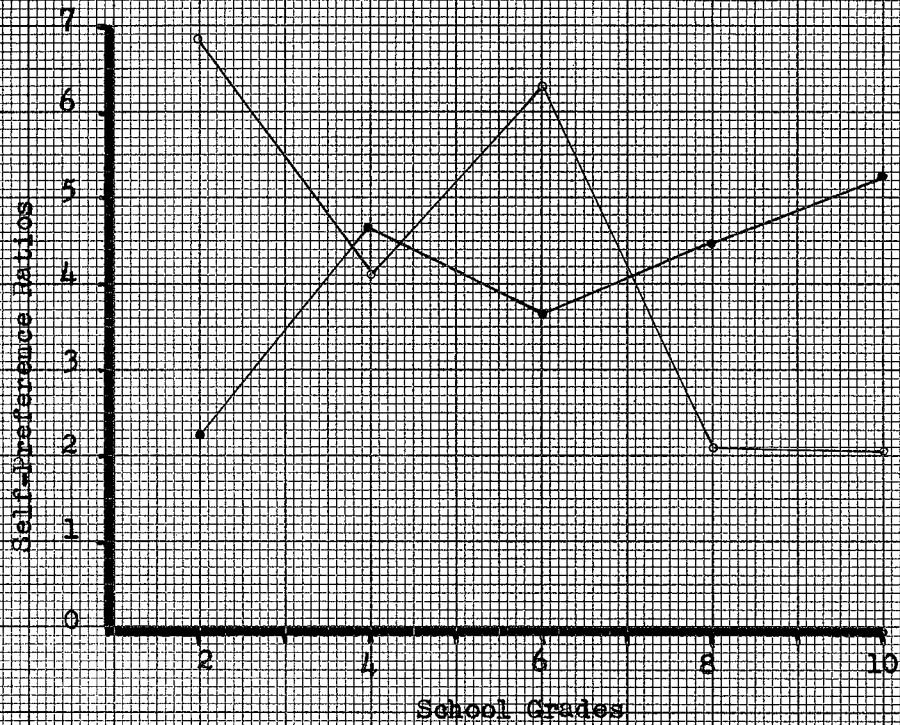


Figure 6. Grade Level Changes in Boys' "sit near" Self-Preference Ratios.

○ Whites      ● Indians

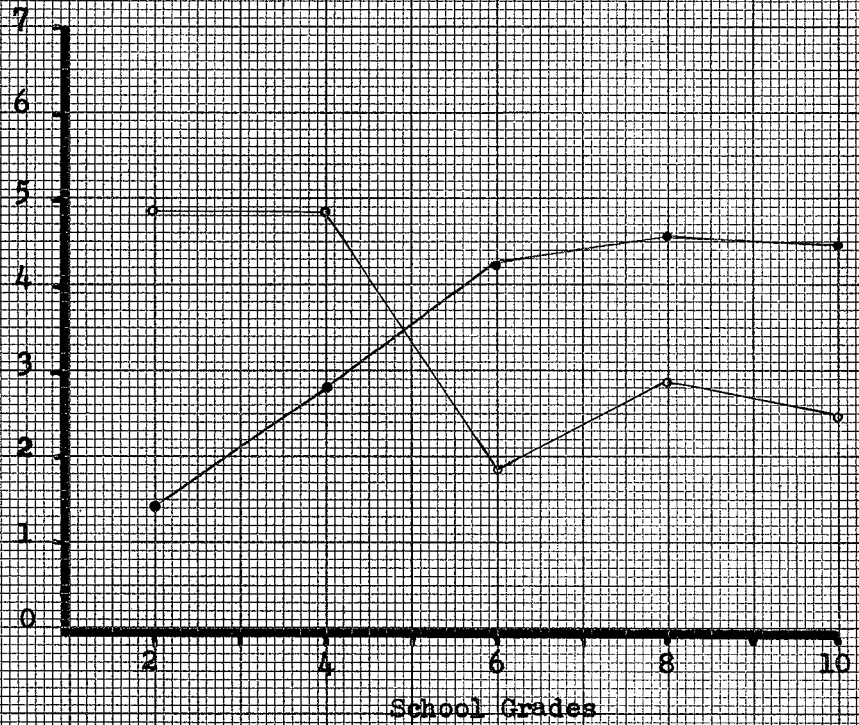


Figure 7. Grade Level Changes in Boys' "work with" Self-Preference Ratios.

○ Whites      ● Indians

TABLE IX

BOYS' "SIT NEAR" RACIAL SELF-PREFERENCE RATIOS  
AS A FUNCTION OF GRADE LEVEL

Grades	Whites			Indians		
	SPR	$\chi^2$	p	SPR	$\chi^2$	p
2	6.85	24.253	.001	2.26	7.839	.01
4	4.10	15.693	.001	4.66	15.135	.001
6	6.31	21.669	.001	3.58	9.126	.01
8	2.10	7.278	.01	4.47	29.358	.001
10	2.03	5.887	.02	5.25	17.925	.001

On the "sit near" criterion, White boys showed very high SPRs ( $p < .001$ ) at grades 2, 4 and 6. These ratios dropped sharply to 2.10 ( $p < .01$ ) at grade 8 and 2.03 ( $p < .02$ ) at grade 10.

On the same criterion, Indian boys showed increasing SPRs with increasing grade level. The grade 2 SPR of 2.26 ( $p < .01$ ) increased sharply to 4.66 ( $p < .001$ ) at grade 4, decreased to 3.58 ( $p < .01$ ) at grade 6 and then steadily increased to a high of 5.25 ( $p < .001$ ) at grade 10.

TABLE X

BOYS' "WORK WITH" RACIAL SELF-PREFERENCE RATIOS  
AS A FUNCTION OF GRADE LEVEL

Grades	Whites			Indians		
	SPR	X <sup>2</sup>	p	SPR	X <sup>2</sup>	p
2	4.84	20.443	.001	1.41	1.217	- -
4	4.82	17.459	.001	2.80	5.198	.05
6	1.84	5.519	.02	4.24	12.739	.001
8	2.87	10.420	.01	4.57	30.689	.001
10	2.47	8.264	.01	4.43	13.274	.001

The White boys' "work with" SPRs were high (4.84 and 4.82,  $p < .001$  for both) at grades 2 and 4, decreasing to a low of 1.84 ( $p < .02$ ) at grade 6. They then increased slightly to 2.87 ( $p < .01$ ) and 2.47 ( $p < .01$ ) at grades 8 and 10 respectively.

The Indian boys' "work with" SPRs increased with advancing grade level. Their insignificant SPR of 1.41 at grade 2 increased to 4.24 ( $p < .001$ ) at grade 6 and stayed in that vicinity for the remaining grades.

Girls' "sit near" and "work with" Self-preference Ratio Changes as a Function of Grade Level.

The girls' choices were broken down into their criteria components - "sit near" and "work with" at each grade level. Their ratios and levels of significance are presented in Tables XI and XII. The graphic representations of these ratios are presented in Figures 8 and 9.

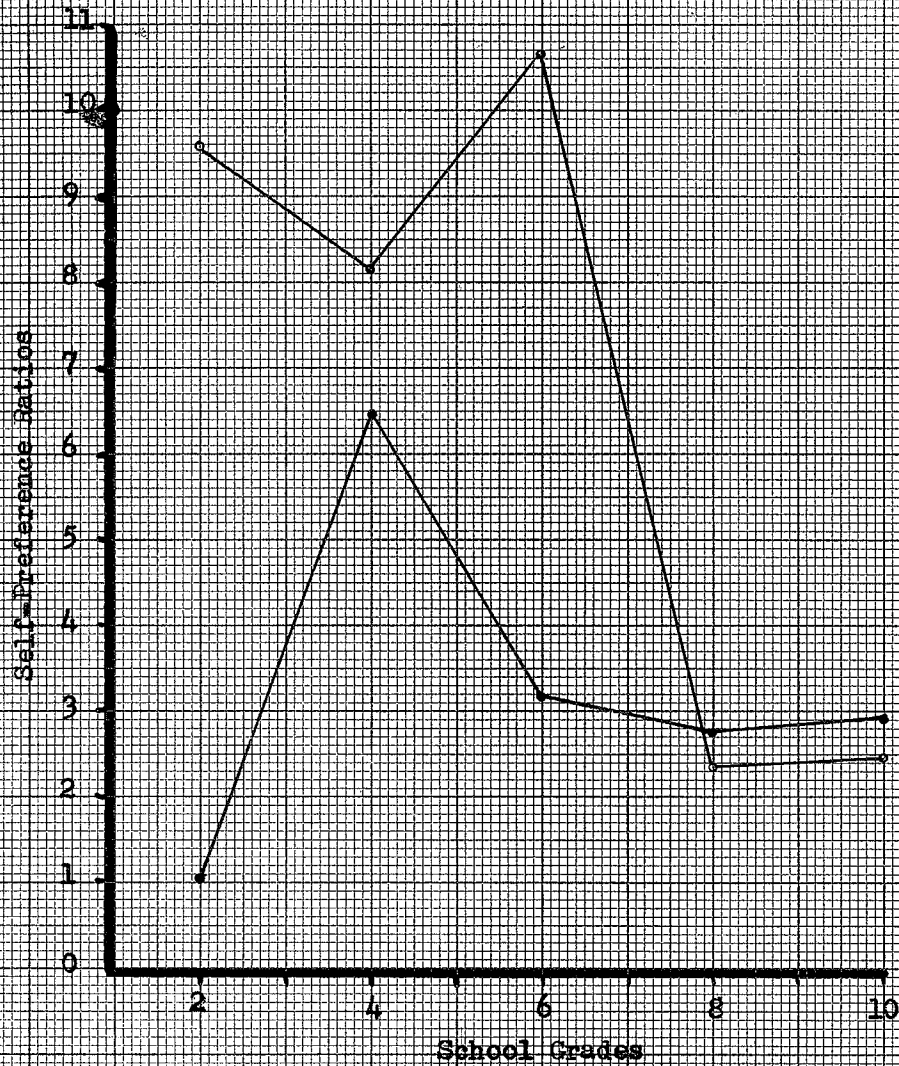


Figure 8. Grade Level Changes in Girls' "sit near" Self-Preference Ratios.

—•— Whites      - - - • - - - Indians

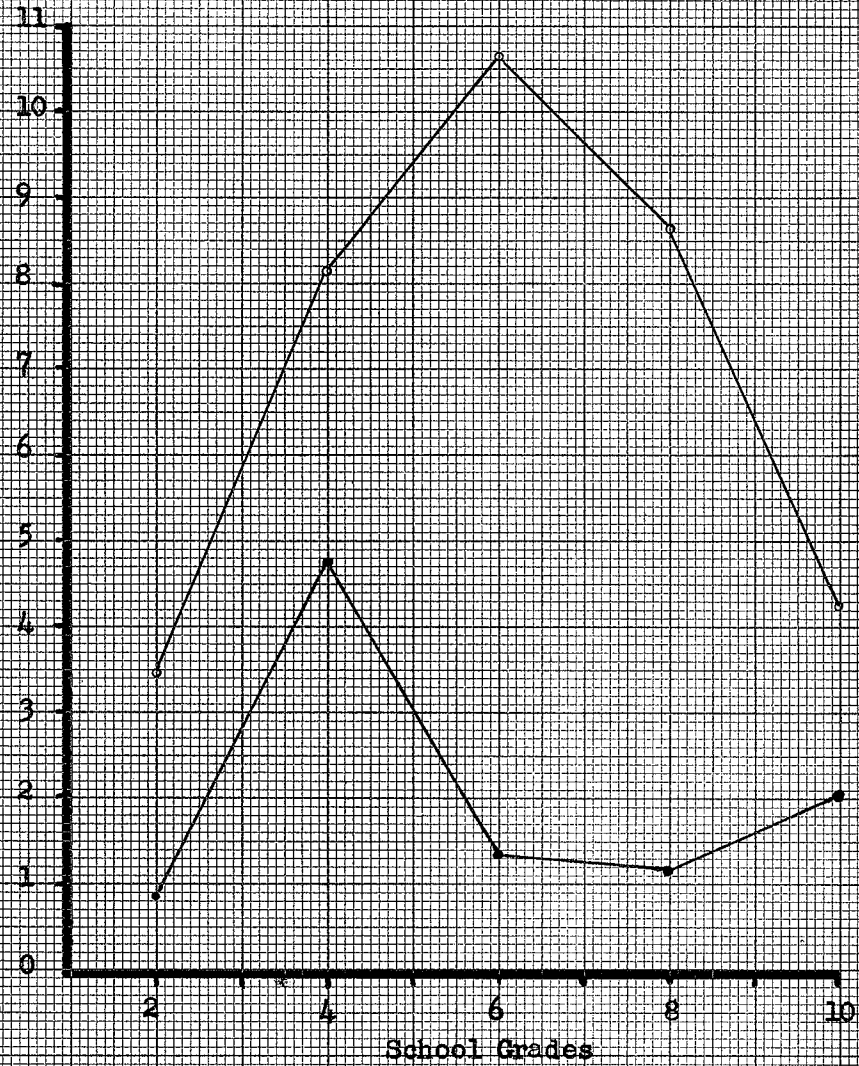


Figure 9. Grade Level Changes in Girls' "work with" Self-Preference Ratios.

—•— Whites      - - - • - - - Indians

TABLE XI

GIRLS' "SIT NEAR" RACIAL SELF-PREFERENCE RATIOS  
AS A FUNCTION OF GRADE LEVEL

Grades	Whites			Indians		
	SPR	$\chi^2$	p	SPR	$\chi^2$	p
2	9.60	22.665	.001	1.04	0.008	--
4	8.16	24.324	.001	6.42	42.802	.001
6	10.65	25.719	.001	3.13	16.271	.001
8	2.35	10.166	.01	2.77	4.585	.05
10	2.42	10.832	.001	2.91	6.443	.01

White girls' "sit near" SPRs were very high - 9.60, 8.16 and 10.65 (all with  $p < .001$ ) at grades 2, 4 and 6. They then dropped sharply to 2.35 ( $p < .01$ ) and 2.42 ( $p < .001$ ) at grades 8 and 10 respectively.

On the "sit near" criterion, Indian girls showed an insignificant SPR at grade 2, a very high 6.42 SPR ( $p < .001$ ) at grade 4, then moderately high SPRs of 3.13 ( $p < .001$ ), 2.77 ( $p < .05$ ) and 2.81 ( $p < .01$ ) at grades 6, 8 and 10 respectively.

TABLE XII

GIRLS' "WORK WITH" RACIAL SELF-PREFERENCE RATIOS  
AS A FUNCTION OF GRADE LEVEL

Grades	Whites			Indians		
	SPR	X <sup>2</sup>	p	SPR	X <sup>2</sup>	p
2	3.48	13.419	.001	.83	0.021	--
4	8.16	24.557	.001	4.79	29.043	.001
6	10.65	25.719	.001	1.33	0.749	--
8	8.64	26.526	.001	1.15	0.000	--
10	4.22	18.835	.001	2.07	2.093	--

White girls exhibited high "work with" SPRs ( $p < .001$ ) at all grade levels. These SPRs began at 3.48 for the grade 2's, rose to 10.65 at grade 6 and then decreased to 4.22 at grade 10.

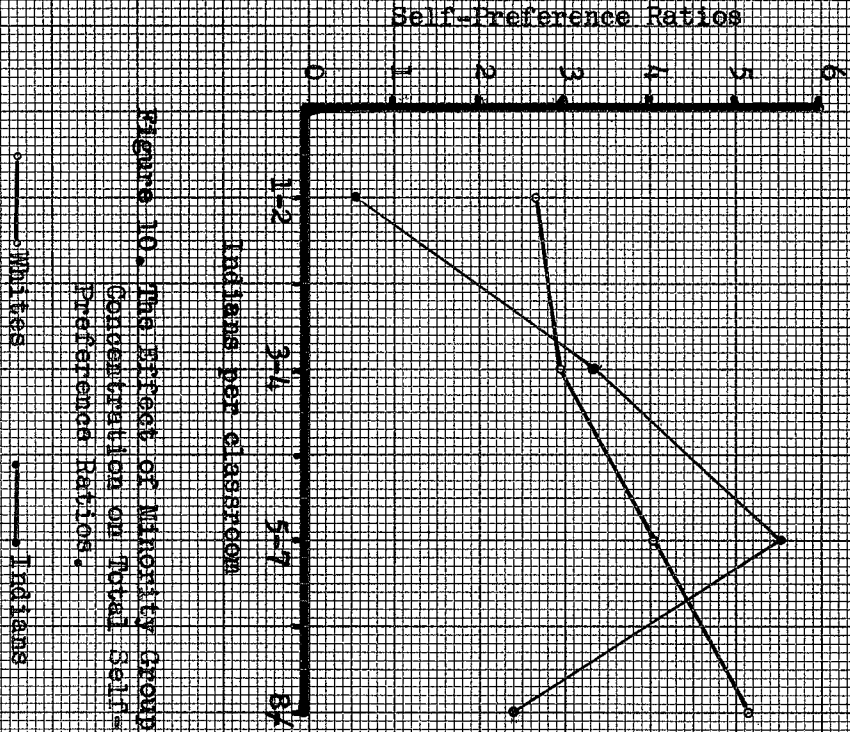
The Indian girls showed insignificant SPRs at all grade levels except grade 4. The grade 4 SPR was a high 4.79 ( $p < .001$ ).

CONCENTRATION OF MINORITY GROUP RESULTS

Total Self-preference Ratio Changes as a Function of Concentration of Minority Group Level.

Self-preference ratios, chi-square values and levels of significance for both Whites and Indians at each of the four concentration levels are shown in Table XIII. These self-preference ratios are plotted in Figure 10.





## XIII

TOTAL RACIAL SELF-PREFERENCE RATIOS  
AS A FUNCTION OF MINORITY GROUP CONCENTRATION

Concentration of Indians	Whites			Indians		
	SPR	X <sup>2</sup>	p	SPR	X <sup>2</sup>	p
(a) 1-2	2.64	21.873	.001	0.55	0.055	- -
(b) 3-4	2.98	42.990	.001	3.35	28.207	.001
(c) 5-7	4.03	90.646	.001	5.59	163.163	.001
(d) 8 +	5.15	181.746	.001	2.40	65.769	.001

The Whites showed moderate and high SPRs ( $p < .001$ ) for all concentration levels of Indians and Metis. Their SPR when 1 or 2 Indians were in the groups was 2.64 and steadily rose to 5.15 for groups with 8 or more Indians and Metis members.

The Indians showed an insignificant SPR of 0.55 when they numbered 1 or 2 in a group of Whites. Their SPR increased from 3.35 ( $p < .001$ ) in groups with 3 or 4 Indians, to a very high 5.59 ( $p < .001$ ) in groups with 5 to 7 Indians and then decreased to 2.40 ( $p < .001$ ) in groups with 8 or more Indians and Metis.

"Sit near" and "work with" Self-preference Ratio Changes as a Function of Minority Group Concentration.

The total choices were broken down into their criteria components "sit near" and "work with" for each of the four concentration levels. These SPRs and levels of significance are presented in TABLES XIV and XV. The graphic representations of these ratios are presented in Figures 11 and 12.

TABLE XIV  
 "SIT NEAR" RACIAL SELF-PREFERENCE RATIOS  
 AS A FUNCTION OF MINORITY GROUP CONCENTRATION

Concentration of Indians	Whites			Indians		
	SPR	X <sup>2</sup>	p	SPR	X <sup>2</sup>	p
(a) 1-2	3.24	13.660	.001	1.10	0.009	- -
(b) 3-4	5.08	32.062	.001	2.97	10.424	.01
(c) 5-7	2.85	32.428	.001	5.37	76.239	.001
(d) 8 /	4.57	83.772	.001	3.48	69.469	.001

For the "sit near" criterion, White children showed significantly high SPRs ( $p < .001$ ) at all four minority groups concentration levels. These SPRs were fairly constant, ranging from 2.85 to 5.08.

The Indian children on the same criterion showed an insignificant SPR at the lowest concentration level, then rose steadily to a very high 5.37 ( $p < .001$ ) at the third concentration level (5 to 7 Indians) and dropped to 3.48 ( $p < .001$ ) in groups with 8 or more Indians and Metis.