

THE UNIVERSITY OF ALBERTA

AN INVESTIGATION OF THE RELATIONSHIP BETWEEN CONTACT  
AND ATTITUDES TOWARD FRANCOPHONES

by



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A THESIS

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## ABSTRACT

The purpose of the present study was to examine the relationship between extent of contact with Francophones and attitudes toward them held by non-Francophones. A secondary purpose was to study the relationship between attitudes toward Francophones held by non-Francophones when compared on the basis of sex, study of French, and languages spoken. The importance of favorable attitudes toward Francophones in the achievement of the communication and cultural understanding objectives in the teaching of French as a second language was given as the pedagogical reason for the study.

The sample consisted of 204 non-Francophone grade 11 students from four rural centralized high schools located in three north-central Alberta towns. Of the 204 subjects, 94 were resident in communities in which a large portion of the population was Francophone.

Attitudes toward Francophones were measured by means of selected items from the Ethnocentrism Scale. The degree of authoritarianism and antidemocratic tendencies were measured by means of selected items from the California F Scale. A multiple-choice format questionnaire was used to determine extent of social interaction with Francophones on 16 selected contact variables. A relative numerical weighting was assigned to the quality and frequency of each contact variable. The total contact score was determined for each subject.

No significant difference was found between scores obtained by high and low contact groups on any of the three criterion measures used.

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An obligation to the anonymity of the four schools in the study does not permit the writer to mention by name the administrators in each school system whose co-operation was essential to the conduct of the study. Nevertheless, their contribution is hereby acknowledged.

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## CHAPTER I

### THE PROBLEM

#### INTRODUCTION

According to the Curriculum Guide for the Teaching of French as a Second Language (Secondary) published by the Alberta Department of Education (1970:2), "The long range goals in the study of modern languages other than English are effective communication and cultural understanding." Walsh et al. (1967:335) state that the two principal objectives are the development of communication skills and familiarity with and understanding of the culture the language represents. The report of an international conference of modern language educators (UNESCO, 1955:17) indicates that most second language programs recognize these major objectives although the relative emphasis given to them varies from country to country.

Although little empirical evidence is available, it is likely that the attitude of the learner toward the people whose language he is learning will be a factor in the realization of the cultural understanding objective. The Alberta Curriculum Guide (1970:2) states the specific objective as follows: "To understand, through the language, the contemporary values and behavior patterns of the people whose language is being studied." Rivers (1968:9) claims that the objective is

. . . to bring the student to a greater understanding of people across national barriers by giving him a sympathetic insight into the ways of life and ways of thinking of the people who speak the language he is learning . . .

According to Oliva (1969:16) the study of a second language helps in overcoming provincialism in the learner.

Increased attention has been given in the last twelve years to the importance of the attitude of the learner toward the people whose language is being learned in relation to the achievement of the communication objective. Studies by Gardner (1960), Lambert, Gardner, Olton, Turnstall and Spilka (1961), and Feenstra (1967) have led to the development of a social psychological theory of language learning. As explained by Lambert (1963:114)

This theory . . . holds that an individual successfully acquiring a second language gradually adopts various aspects of behavior which characterize members of another linguistic-cultural group. The learner's ethnocentric tendencies and his attitudes toward the other group are believed to determine his success in learning the new language.

Since it is likely that attitudes toward the other group could be an important factor in the achievement of both major objectives in second language learning, it would seem reasonable that more attention be given to these attitudes in the learner. The teacher might determine first of all whether the attitudes are favorable, unfavorable or indifferent. If they are unfavorable or indifferent, he is probably faced with two alternatives. He might accept the learner as he is and proceed with the knowledge that the major objectives of the learning experience are not likely to be fully realized, partly as a result of the unfavorable or indifferent attitudes toward the group whose language is being studied. The second and more pedagogically defensible alternative is for the teacher to undertake to modify the unfavorable or indifferent attitudes to favorable ones. Stern (1972:31) supports this

approach, adding that

. . . the teacher can contribute very considerably to a change of attitudes by his teaching, by influencing parents, and . . . by providing opportunities for direct experiences such as travel, exchanges etc.

Some of the educational techniques used by teachers to develop more favorable attitudes toward another linguistic or ethnic group include the use of reading materials, audio-visual materials, role playing, discussion, and contact with native speakers of the language.

Contact with people whose first language is not the principal language of the area nor the language of instruction of the school is certainly possible within the context of the school situation. The nature of the settlement of Western Canada by many different ethnic groups, for example, resulted in contact between students of different ethnic origins as classmates in school. Teachers whose first language is not the language of instruction of the school have provided contact with another ethnic group, for some students. Guest speakers in the school or field trips to places of interest in the community have been another source of contact. Certain Canadian school districts such as the Scarborough Board of Education and the Edmonton Public School Board employ paraprofessional teaching assistants whose first language is French. Part of their function is to provide students with the opportunity for contact with Francophones. Exchange programs such as Young Voyageurs, which is subsidized by the Canadian Federal Government, have provided an opportunity for a limited number of English-speaking students to come into contact with Francophones in Canada. Contact with other ethnic groups as a result of the schooling process, then, is

possible for at least some students in some parts of Western Canada.

The focus of the present study is on the role of contact with Francophones in determining attitudes toward them held by senior high school non-Francophone students. Subjective observation suggests that contact does not automatically result in increased understanding. What is needed then is more research in order to determine the conditions under which contact may be a positive factor in increased understanding between two ethnic groups.

#### NEED FOR THE STUDY

There are three reasons why a study such as the present one is necessary. The first reason is that intolerance in intergroup relations is a continuing social problem which requires study. Second, there is a dearth of basic research on the relationship between attitudes and contact with ethnic groups in Canada generally, and in Alberta particularly. According to Chabassol (1970:3)

Very little objective research has been carried out on attitude possession and formation in Canadian adolescents. This deficiency in research is especially noticeable with reference to prejudice in Canadian youth.

The third reason deals with the importance of attitudes in the field of second language learning. If it is accepted that unfavorable attitudes toward the people whose language is being learned may adversely affect the achievement of both the communication objective and the cultural understanding objective, it would seem desirable that second language teachers attempt to modify unfavorable or indifferent attitudes to favorable ones. One approach to modification of attitudes is through

direct contact with people whose first language is the language being studied. Unfortunately, what research is available on contact between two ethnic groups appears to be conflicting and inconclusive. For example, Irish (1952) found that residence proximity was a positive factor in producing more favorable attitudes between two ethnic groups, while Shuval (1962) found that residence proximity was less important than the ethnic origin of the interacting participants. With respect to research on contact involving school students, Campbell (1958) discovered more favorable attitudes, Lombardi (1962) discovered no significant difference, and Campbell and Schrader discovered more unfavorable attitudes. Continued study of the problem may suggest ways in which the effectiveness of second language teaching might be improved through provision of certain contact experiences with the people whose language is being learned.

#### STATEMENT OF THE PROBLEM

The problem to be studied is whether wide and intimate contact, as compared with limited contact with members of an ethnic group, is related to the attitudes toward members of that group held by members of another ethnic group.

#### PURPOSE OF THE STUDY

The purpose of the study is to determine whether there is any difference in attitudes toward Francophones held by senior high school non-Francophone students who have had a wide and intimate social relationship with Francophones and those who have had a limited social

relationship with Francophones.

The study will also investigate the relationship between attitudes toward Francophones held by non-Francophones when compared on the basis of sex, current study of French, and languages spoken by the subjects and by the parents of the subjects.

#### DEFINITION OF TERMS

##### Attitude

The definition used shall be that proposed by Klineberg (1954: 508). An attitude is

. . . a state of readiness for certain types of response. It may be adopted ready-made by imitation of others, or it may be due to personal experiences of various kinds. It expresses itself frequently in the form of a stereotype or "picture in our heads", which may have a marked influence upon perception and behavior; such stereotypes may apply to single individuals or to groups.

##### Contact

Contact shall be interpreted to mean social interaction between individuals as measured by the 16 contact variables included in the research instrument. The contact variables are found in items 51, 54, 55, 56, 57, 59, 60, 61, 62, 64, 65, 67, 69, 70, 71, and 72 of the instrument as presented in Appendix A. These items sample possible contacts such as that provided through friendship, neighbors, teachers and teams.



### Contact Quality

Contact quality shall be used to refer to the relative opportunity provided by each of the 16 contact variables for interacting participants to come to know each other as individuals. Each of the 16 contact variables was assessed by a group of judges as having low, medium, or high quality. That is, each variable was judged to be of low, medium or high relative importance in providing an opportunity for interacting participants to come to know each other as individuals. For example, visiting Francophone businesses or schools was considered to be a low quality contact. Having a Francophone teacher was considered to be a medium quality contact. Having a very close Francophone friend was considered to be a high quality contact. A numerical weighting of 1, 2, or 3 was assigned for low, medium and high quality contact respectively. The maximum possible contact quality score is 32.

### Contact Frequency

Contact frequency shall refer to how often or how long the social interaction occurred, or to how many Francophones or Francophone organizations were involved in each of the 16 contact variables. Each of the possible responses for the 16 contact variables was assessed by a group of judges as being of low, medium or high frequency. For example, attendance in classes with Francophone students for one to three years was considered to be a low frequency contact. Attendance in classes with Francophone students for from four to five years was considered to be a medium frequency contact, while attendance in such classes for six

years or more was considered to be a high frequency contact. A numerical weighting of 1, 2 or 3 was assigned for low, medium and high frequency contact respectively. The maximum possible contact frequency score is 48. The reader should note that the assessments described in the definition of contact frequency represent judgments relative to the possible alternatives provided by the investigator. For example, in the item on the number of teams or clubs which included Francophones, assessments were sought on the basis of the following divisions: one, two to five, six to ten, more than ten. The divisions were arbitrary and might be questioned even though an attempt was made to render them logical.

#### High Contact

High contact shall refer to social interaction which is both relatively frequent and of a high quality. Of a total possible contact score of 80 for the 16 variables, subjects whose contact score is more than 42 shall be considered to have had high contact with Francophones. The cutting point was determined after examination of a frequency histogram of the contact scores for all subjects.

#### Low Contact

Low contact shall refer to social interaction which is relatively infrequent and of a low quality. Subjects whose contact score on the 16 variables is less than 33 shall be considered to have had low contact with Francophones. This cutting point was determined as a result of examination of a frequency histogram of the contact scores for all

subjects.

#### Equal Status Contact

The definition proposed by Elliott (1971:13) shall be used.

Equal status contact is interaction that takes place between occupants of the same position in the social structure, e.g., soldiers of the same rank, hockey players on the same team, housewives of the same social class, students in the same program of studies . . .

#### Ethnic Group

The definition proposed by Harding et al. (1969:3) has been selected for the present study.

An ethnic group is a collection of people considered both by themselves and by other people to have in common one or more of the following characteristics: (1) religion, (2) racial origin . . ., (3) national origin, or (4) language and cultural traditions.

#### Ethnocentrism

The definition used shall be that proposed by Harding et al. (1969:16). Ethnocentrism is ". . . a general response tendency manifested by hostility indiscriminately expressed toward Negroes, Jews, and outgroups in general."

#### Francophone

A Francophone is a person who is considered by himself and by others to be a member of the French-speaking ethnic group.

### French Attitude Scale

The term French Attitude Scale shall refer to a 20-item measure of attitudes toward Francophones. Developed by W. E. Lambert of McGill University, it is presented in Jakobovits (1970:263-264).

### Ethnocentrism Scale

The term Ethnocentrism Scale shall refer to a seven-item measure of attitudes toward outgroups in general. This scale was developed by Adorno et al. (1950).

### California F Scale

The term California F Scale shall refer to a 14-item measure of authoritarianism and anti-democratic tendencies. This scale was also developed by Adorno and his colleagues (1950).

### Ingroup

The term ingroup shall refer to any group of people who can use the word we with the same significance. Normally the ingroup may vary depending on the situation. For one person it might at various times be his family, community, church, club, political party, ethnic group, province or country. The term shall apply specifically to the individual's ethnic group for the present study.

### Outgroup

Outgroup shall refer to those people who are not members of the

ethnic ingroup.

#### DESIGN OF THE STUDY

The sample consists of 204 non-Francophone grade 11 students from three communities located in north-central Alberta. The proportion of Francophones in two of the communities is approximately 50%, while in the third it is less than 5%. Of the 204 subjects, 94 live in one of the two Francophone communities.

The French Attitude Scale (Jakobovits, 1970:263-264) and selected items from the Ethnocentrism Scale (Adorno et al., 1950) will be administered to determine attitudes toward Francophones and outgroups in general. In addition, selected items from the California F Scale (Adorno et al., 1950) will be administered to determine antidemocratic and authoritarian tendencies.

#### ASSUMPTIONS

For the purpose of this study it is assumed that:

1. Attitudes toward ethnic groups are measurable by paper-and-pencil multiple-choice format items.
2. The differences in scores on the three scales represent differences in attitudes toward Francophones, in attitudes toward outgroups in general, and in the degree of authoritarianism.
3. The subjects were able to understand the items in the questionnaire.

### DELIMITATIONS

The study is delimited in the following ways:

1. The subjects were grade 11 non-Francophone students ranging from 15 to 18 years of age. Attitudes toward Francophones held by younger or older students might vary as a result of a number of factors. The results of the present study are therefore not generalizable to other age groups.
2. The study was limited to attitudes toward Francophones only. The results might be different if the attitudes toward another minority ethnic group had been the focus of the research.
3. The study was limited to four rural centralized senior high schools. A similar study conducted in different rural schools or in an urban setting might not yield the same results.
4. The amount of contact with Francophones for each subject is limited to the 16 contact variables included in the study. These contact variables should not be considered to be inclusive of all possible types of contact.

### LIMITATIONS

The following limitations must be recognized:

1. Attitude scores obtained on paper-and-pencil measures are not exact indicators of overt behavior. According to Osgood, Suci and Tannenbaum (1957:198), "One of the most common criticisms of attitude scales of all types is that they do not allow us to predict actual behavior in real-life situations . . .". These same authors contend,

however, that attitude scales can indicate a disposition toward certain classes of behavior. Nevertheless, the results of this study will likely be of limited effectiveness in predicting the actual behavior of non-Francophone students as they interact with Francophones.

2. There is no guarantee that the subjects have responded to the items as they really perceive the situation. The veracity of the information cannot be validated. Although the items from the three scales were randomly distributed so as to avoid response set, the investigator cannot tell how many subjects were so affected. Although the investigator was not known by the subjects, and although no indication was given either verbally or in writing as to his bias and involvement with the teaching of French, it is not possible to determine how many subjects may have demonstrated the phenomenon of acquiescence. That is, some subjects may have tried to answer the items so as to provide the type of results which the investigator seemed to be seeking.

3. The investigator had hoped to study contact between a majority linguistic group (English speakers only) and a minority linguistic group (Francophones). In fact, the number of subjects who came from a home background where English only is the language spoken is rather small (approximately 30%) in one of the Francophone communities. The result is that it is contact between two minority groups rather than between a majority group and a minority group that is central to the study. Relatively little research has been conducted in this area. It should be recognized that this limitation detracts from neither the need for the present study nor from its value.

4. A certain bias in the framing of the contact items may have

resulted from the investigator's own predispositions even though considerable effort was expended in seeking expert opinion and in piloting the research instrument. The limitations introduced in this manner may be very difficult to detect and even more difficult to control.

### HYPOTHESES

The following null hypotheses will be tested. It is hypothesized that:

1. There is no significant difference between the French Attitude Scale scores obtained by non-Francophone students who have had high contact with Francophones and non-Francophone students who have had low contact with Francophones when compared on the basis of sex and no interaction.

1a. There is no significant difference between the French Attitude Scale scores obtained by non-Francophone students who have had high contact with Francophones and non-Francophone students who have had low contact with Francophones.

2. There is no significant difference between the Ethnocentrism Scale scores obtained by non-Francophone students who have had high contact with Francophones and non-Francophone students who have had low contact with Francophones when compared on the basis of sex and no interaction.

2a. There is no significant difference between the Ethnocentrism Scale scores obtained by non-Francophone students who have had high contact with Francophones and non-Francophone students who have



had low contact with Francophones.

3. There is no significant difference between the California F Scale scores obtained by non-Francophone students who have had high contact with Francophones and non-Francophone students who have had low contact with Francophones when compared on the basis of sex and no interaction.

3a. There is no significant difference between the California F Scale scores obtained by non-Francophone students who have had high contact with Francophones and non-Francophone students who have had low contact with Francophones.

4. There is no significant difference between the French Attitude Scale scores obtained by non-Francophone students who have had high contact with Francophones and non-Francophone students who have had low contact with Francophones when compared on the basis of current study of French and no interaction.

5. There is no significant relationship between the French Attitude Scale score obtained and the language(s) spoken by the subject.

6. There is no significant relationship between the French Attitude Scale score obtained and the language(s) spoken by the father of the subject.

7. There is no significant relationship between the French Attitude Scale Score obtained and the language(s) spoken by the mother of the subject.

#### OVERVIEW OF THE REPORT

The first chapter has included a discussion of the need for the

study, a statement of the problem and the purpose of the study, definition of terms, the design of the study, delimitations, limitations, assumptions, and hypotheses. The relevant literature will be reviewed in Chapter II. Chapter III will present details of the instrumentation, sampling and research procedures, and statistical methods used in the study. The results of the study will be presented and discussed in Chapter IV. The final chapter will include a summary of findings, implications for the teaching of second languages, and suggestions for further research.

## CHAPTER II

### REVIEW OF THE LITERATURE

It is generally recognized that attitudes toward ethnic groups have their roots in both the sociocultural milieu and the psychological processes of the individual. Hollander and Hunt (1967:330), in writing about attitudes, say that there appear to be three sources in particular: personality development, explicit and implicit learning from others, and direct experience with the object. This categorization will be used in organizing a review of the relevant literature. In light of the subject of the present research, however, the major emphasis will be placed on literature related to direct experience or contact with the object.

Before undertaking the review, it might be noted that 16 of the 31 studies reviewed in this chapter are more than ten years old. The reason is that the bulk of the available research on contact and ethnic attitudes appears to have been conducted prior to 1960. Any consideration of the field will thus reflect this situation. Many of these studies are of importance to the field and are cited in recent reviews. For example, an analysis of the more than 350 references on this topic presented by Harding et al. (1969:61-76) reveals that approximately 5% of the articles or books were published in the 1920's, 13% in the 1930's, 19% in the 1940's, 41% in the 1950's, and 22% in the 1960's. Approximately 80% of the references are dated prior to 1960. Date of publication will not be regarded as a criterion for exclusion or inclusion of a particular

study in the review. Relevance to the present study will be the primary consideration.

#### PERSONALITY DEVELOPMENT

The relationship between personality and ethnic attitudes has been the subject of considerable research in the last 25 years. Perhaps the most important investigation in this area, The Authoritarian Personality, was conducted in the United States by Adorno, Frenkel-Brunswik, Levinson and Sanford (1950). A number of attitude scales including the California F (Fascism) Scale and the California E (Ethnocentrism) Scale were developed and widely tested for validity and reliability by Adorno and his colleagues in the United States in the years 1948 to 1950. The F Scale was designed to measure the ways of thinking and feeling thought to characterize those people who are willing to accept an antidemocratic ideology. Shils (1954:33) describes the following characteristics of authoritarians as measured by the F Scale.

- a) Extreme hostility towards "outgroups;"
- b) Extreme submissiveness towards the "ingroups;"
- c) The establishment of sharp boundaries between the group of which one is a member and all other groups;
- d) The tendency to categorize persons with respect to certain particular qualities and make "all or none" judgments;
- e) A vision of the world as a realm of conflict;
- f) Disdain for purely theoretical or contemplative activities;
- g) A repugnance for the expression of sentiments,

particularly sentiments of affection;

- h) Belief that oneself and one's group are the objects of manipulative designs and that oneself and one's group can survive only by the manipulation of others;
- i) The ideal of a conflictless wholly harmonious society in contrast with an environing or antecedent conflictful chaos.

The Ethnocentrism Scale was designed to measure the degree of rejection of outgroups such as Negroes, Jews and ethnic groups in general. Adorno et al. (1950:150) describe the phenomenon which they call ethnocentrism as follows.

Ethnocentrism is based on a pervasive and rigid ingroup-outgroup distinction; it involves stereotyped negative imagery and hostile attitudes regarding outgroups, stereotyped positive imagery and submissive attitudes regarding ingroups, and a hierarchical, authoritarian view of group interaction in which ingroups are rightly dominant, outgroups subordinate.

The person who scores high on the Ethnocentrism Scale presumably feels threatened by most of the groups to which he has no sense of belonging. The primary characteristic of the high scores on this scale is the generality of outgroup rejection.

The main difference between the F Scale and the Ethnocentrism Scale is that the latter is less openly ideological. Adorno et al. found a correlation of 0.75 between the F Scale and the Ethnocentrism Scale scores.

Using the California F Scale and the Ethnocentrism Scale, McClosky (1958) found differences in personality between liberals and conservatives. For example, conservatives in his study of 1200 adults in Minnesota tended to score on the undesirable side of personality variables. Extreme conservatives were found to be easily the most

hostile and suspicious, the most rigid, and the most intolerant. Only 11% of the liberals scored at the high (undesirable) end of the Ethnocentrism Scale compared with 71% of the extreme conservatives.

The relationship between ethnic attitudes and personality factors other than authoritarianism has been the subject of considerable research. In view of the fact that these other personality factors will not be included in the present study the discussion has been limited to research on the Ethnocentrism Scale and the California F Scale.

The reader should be aware that the research by Adorno et al. was conducted with adults in the United States over 20 years ago. Utilization of these scales with Canadian adolescents in 1972 may not yield comparable results. Some of the items are dated. For example, the United Nations is referred to as a new world organization. Such an expression for subjects born in the mid-1950's probably lacks relevance and may even be slightly puzzling. Some minor revision of certain items will therefore be necessary.

The political context may also have changed sufficiently from 1950 to 1972 to affect results. For example, fascism and antidemocratic tendencies were factors to which subjects were highly sensitive in 1950. The situation may not be the same today.

In spite of the qualifications noted, the Ethnocentrism Scale and the California F Scale were considered to be the most suitable personality measures available for the present study (Harding et al. 1969:13).

### EXPLICIT OR IMPLICIT LEARNING FROM OTHERS

A number of authorities in the field of social psychology (Lambert and Klineberg, 1967:228), (Hollander and Hunt, 1967:330), (Pettigrew, 1966), and (Allport, 1954) agree that attitudes toward ethnic groups may be learned as a result of contact with people who hold these attitudes. It is suggested that parents, the norms of the social milieu, and education may all contribute to the development of certain attitudes.

Parents undoubtedly are the primary agents of socialization. With respect to ethnic attitudes, parents' teachings are often unconscious and seldom planned or direct. Numerous studies have demonstrated that parents are an influential factor. Using pictorial "Show me" questions in an interview situation Horowitz and Horowitz (1938) found indications that parents were the most important source of attitudes toward ethnic groups in their study of 83 elementary school children in southern United States. Allport and Kramer (1946), in their study of 437 American college students, found that 69% of their subjects reported having been influenced to some extent by parental attitudes. The research instrument employed was a six-part questionnaire which sought information on attitudes toward and experience with minority groups such as Negroes, Jew, Catholics, Orientals and Italians.

The importance of social norms in the development of ethnic prejudice was the subject of two studies conducted by Pettigrew (1958) in South Africa and the United States. The South African sample consisted of 627 white undergraduate university students while the United States

sample consisted of 366 randomly-selected white adults drawn from eight roughly matched communities in the North and the South. Pettigrew administered 13 items from the California F Scale, a 16-item measure of conformity and an 18-item measure of anti-Negro attitudes. Controlling for the variable of authoritarianism, Pettigrew found that individuals in both South Africa and southern United States who conformed more strongly to social norms in general were more prejudiced. A correlation of +0.42 which is significant at the 0.01 level was found between attitudes and conformity in South African subjects. It was found that native-born South African subjects were more anti-Negro ( $p \leq 0.01$ ) than those who had been born elsewhere. However, there was no difference in their scores on authoritarianism as measured by the California F Scale. Similar results were obtained in a comparison of the southern and northern communities in the United States. An interesting difference between the two sample populations in the United States is that women, traditionally viewed as carriers of the culture, were significantly more anti-Negro than men in the southern sample but not in the northern sample. Pettigrew (1958:318) concludes

In areas with historically imbedded traditions of racial intolerance, externalizing personality factors underlying prejudice remain important, but sociocultural factors are unusually crucial and account for the heightened racial hostility.

Studies correlating education with attitudes toward ethnic groups have generally found that those who are better educated tend to be less intolerant. Allport (1954:405) and Williams (1964) both report results which support this generalization. However, Stember (1961:171) found no clear-cut relationship between education and prejudice. This researcher



collected data from a large number of surveys conducted between 1944 and 1959. Personal interviews directed by trained professional interviewers were held with more than 40,000 subjects. Stember discovered that the educated, those who had at least completed high school, are more likely to reject intimate contact with minority groups, to hold derogatory stereotypes, and to favor certain types of informal discrimination. They are, however, less likely to reject casual contact with minority groups. Stember's conclusion is significant.

It would thus appear that the impact of education is limited. Its chief effect is to reduce traditional provincialism - to counteract the notion that members of minorities are strange creatures with exotic ways, and to diminish fear of casual personal contact. But the limits of acceptance are sharply drawn; while legal equality is supported, full social participation is not.

The influence of explicit or implicit learning of ethnic attitudes as taught by parents, schools and the cultural norms must be considered in a study of contact and ethnic attitudes. This source of attitudes may be of such importance that the effect of direct contact may be minimized or even neutralized. Length of residence in a Francophone community, for example, might provide some indication of the attitudes toward Francophones prevalent in the community.

#### DIRECT EXPERIENCE

Considerable research has been conducted on the relationship between ethnic attitudes and contact with members of ethnic groups. Some of the more important studies will be reviewed in this section. Despite the fact that most of the research in this area has been conducted in the United States, important research done in other countries will be

reviewed as well.

The relevant studies have been divided into three major categories: contact involving adults; contact involving children in school settings; and contact involving children in non-school settings.

#### Contact Involving Adults

Studies concerned with adult ethnic attitudes and contact have dealt with contact involving residence proximity, work, business transactions, membership in voluntary organizations, social status, foreign travel, and foreign students. Of the twelve studies reviewed, six found that contact resulted in favorable attitude change toward another ethnic group. Two studies found no significant difference and the remaining four obtained conflicting results. Some types of contact in the latter four studies resulted in more favorable attitudes while other types of contact did not.

Wilner, Walkley and Cook (1952) studied the relationship between proximity of Negro and white living quarters and attitudes toward Negroes held by white residents of unsegregated housing projects in New York City. The sample comprised 806 white women. Interviews were conducted with each subject in order to ascertain the amount of contact with Negroes and their attitudes toward them. Comments about Negroes were rated as positive, negative or neutral. The investigators found that the closer the white and Negro families lived to each other, the more frequent the contact and the larger the favorable shift in attitude on the part of the white subjects. The difference was significant at the  $<0.05$  level.

Irish (1952) interviewed 154 white residents of Boulder, Colorado

who had had Japanese-American neighbors from 1942 through 1945, and 113 white residents who had not had Japanese-American neighbors. Six questions were asked about Japanese-Americans. A total attitude score was obtained by assigning a weighting of two points for a favorable answer, one point for a neutral answer and no points for an unfavorable answer. Irish concluded that friendly personal contact made possible by living in the same block produced changes in attitudes toward Japanese-Americans which were significant at the  $\leq 0.01$  level. It is important to note that he also discovered that casual contact through work and through customer-salesman relationships were more productive of favorable attitudes than no contact at all but not at a statistically significant level.

Shuval (1962) also studied residence proximity. However, she obtained results which do not fully support the findings of Wilner, Walkley and Cook and Irish. Shuval's study, which involved contact among ethnic groups was conducted with 725 subjects in Israel. Interviews were conducted to determine feelings of satisfaction with neighbors. Shuval discovered that satisfaction with neighbors depended more on the ethnic origin of those neighbors than on residence proximity. For example, European families did not react favorably to having either Near Easterners or North Africans living on both sides of them. Conversely, the Near Easterners and the North Africans reacted very favorably to having European neighbors living on both sides of them. Shuval concluded that the differences which she found were attributable to a difference in the perceived status of the ethnic groups involved.

In a study conducted in Wales by Chadwick-Jones (1962), 97

residents of a community of 9,000 were interviewed to determine the extent of their contact with, and their attitudes toward, several hundred Italian workers living in the community. Responses to interview questions about Italians were classified as favorable, unfavorable or undecided. The investigator found indications that the favorableness of attitude was associated with the type of contact. Those residents such as store clerks and policemen who had had frequent face-to-face interaction, and those who had had continuous interaction as work partners expressed positive attitudes. It is noteworthy that Irish called this type of interaction casual contact and his conclusion was that such interaction is less productive of favorable attitude change than more intimate contact such as neighbors or members of a voluntary organization. Unfortunately, Chadwick-Jones did not investigate these factors. Males were found to be more unfavorable toward Italians, a finding which was significant at the  $< 0.05$  level.

In a large study involving 8,000 subjects drawn from throughout the United States, Williams (1964) attempted to determine the extent of contact, and the relationship of contact with attitudes held by Americans toward Negroes, Jews, Mexican-Americans and Italian-Americans. Interviews were held in which the subjects were asked about their contact with members of other ethnic groups, and whether they felt differently as a result. Williams found great variety in the frequency and kinds of contact depending on the situational context, the minority groups involved, and the status characteristics of the subjects. In addition, he found that males are more likely than females to be exposed to intergroup contact. Williams' findings that people who are relatively

unprejudiced are more likely to have ethnic contact, and that those who interact across ethnic lines are more likely to be relatively unprejudiced, does not resolve the problem concerning which was cause and which was effect. Do people interact with minority groups because they are ethnically tolerant or are they ethnically tolerant as a result of their interaction with such groups? Williams suggests that both probably occur. His findings also suggested that interminority prejudice was just as much related to interaction as majority-minority prejudice. The value of this study would have been greatly enhanced if Williams had included levels of statistical significance with his data.

Allport and Kramer (1946) used a questionnaire to study attitudes and their causes in 437 white college students. They found that the more numerous the contacts with Negroes, the less evidence there was of unfavorable attitudes. Equal-status contacts seemed particularly favorable to the existence of positive attitudes. With respect to Jews however, it was found that contact without equal status resulted in more unfavorable attitudes. The investigators also found that contact in which two groups were equally deprived of status, e.g., poor whites and poor Negroes, resulted in increased rivalry and less favorable attitudes.

Another study whose results must be termed qualified was conducted by Triandis and Vassiliou (1967). Using a semantic differential instrument, the investigators studied the attitudes of 102 American males toward Greeks and of 80 Greek males toward Americans. Each subject was classified in one of three groups, i.e., maximum contact, medium contact, or low contact, according to the portion of daily social behavior with

members of the other group. This was an attempt to measure frequency of contact but it did not differentiate as to the quality of the contact situations. The results of the study were conflicting in that maximum contact resulted in more favorable stereotypes by Greeks of Americans (significant at the  $< 0.001$  level) but less favorable stereotypes by Americans of Greeks (significant at the  $< 0.0001$  level). Relative status of the interacting groups was suggested by the investigators as an explanation of the disparity in results.

Contact resulting from travel in another country is not the same as contact between groups which are both resident in the same country. Nonetheless, such contact may result in attitude change and is therefore pertinent. Reigrotski and Anderson (1959) studied the relationship between attitudes and contact using 1079 subjects in Belgium, 2006 subjects in France, 2041 subjects in Germany and 1000 subjects in Holland. The attitudes of the subjects toward Belgians, the Dutch, the French, Germans and Italians were obtained through a questionnaire administered in an interview. The subjects were asked to select those adjectives from a list of 12 adjectives which seemed to describe each of the five ethnic groups. They were asked to describe the five ethnic groups in their own words and to rate them in terms of the easiest and the most difficult to get along with. A weighting was assigned to the quality of each of three types of contact: visiting the country; speaking the language of that country; and having friends or relatives in the country. The latter type was assigned a weighting of two, while the first two types were each assigned a weighting of one. Their weighting scale could however, be questioned. It is doubtful

whether simply having relatives in the country should be considered a higher quality contact than visiting that country. Reigrotski and Anderson (1959:528) conclude that "Increasing foreign contacts tends to increase favorable opinion about other peoples . . ."

Smith (1955) also studied the effect on attitudes of contact resulting from a visit to a foreign country. He gave pre-tests and post-tests to 183 secondary school and college students who spent two months vacationing in Europe. The research instrument included the Worldmindedness Scale and selected items from the California F Scale, the Ethnocentrism Scale and the Democracy Scale. Smith reported that there was no significant attitude change as a result of the foreign contact. Knowledge of the subjects' attitudes before the intercultural experience was a better predictor of change than contact. For example, those subjects who were extremely ethnocentric and nationalistic before the experience tended to become more ethnocentric and nationalistic as a result of the experience.

A number of studies have been conducted on the effect of contact on the attitudes of foreign students. Although this is a field of research which is not directly applicable to the present study, it does provide a very meaningful parallel. A study done by Schild (1962) on 59 Jewish-American college students aged 17 to 21 studying in Israel for a year obtained results which are pertinent. Five written questionnaires were administered to each subject before, during and after the sojourn. Intensive interviews were held with 15 subjects, the behavior of all 59 subjects was noted, and the personal diaries of a few of the subjects were studied. In comparing the effectiveness of three types of contact,

i.e., participation, observation, and explicit communication, the investigator concluded that the most lasting favorable attitude changes were induced through participation, then observation, and lastly, explicit communication. Unfortunately, Schild reports no level of statistical significance. Such information is particularly important where such a small sample is involved.

Selltiz (1955) studied 348 students from 59 countries attending 34 colleges and universities in the United States. She found that students who reported having one or more close American friends were more favorable to Americans than students who reported no close American friends. This investigator was very cautious in her conclusions, stressing the probable importance of a number of factors such as past experience, personal characteristics, and events on the international scene.

Jones and Lambert (1959) studied attitudes of 157 Canadian citizens of British origin toward German and Dutch immigrants. A 29-item questionnaire on prejudice, which was developed for the study, was read to each subject by an interviewer. No association was found between the subjects' attitudes and their religious affiliation, ethnic origin, length of residence in the community, age, sex, or marital status. In addition the investigators found no statistically significant association between attitudes and contact frequency or spheres of activity. Jones and Lambert report that their results indicate that voluntary contact such as that involved as members of clubs is more influential than non-voluntary contact such as that involved as work partners.

A number of implications for further research derive from an analysis of the twelve studies reviewed. Of the three studies on



residence and ethnic attitudes (Wilner, Walkley and Cook, 1952), (Irish, 1952), (Shuval, 1962), none of them focused on length of residence. There is lack of agreement concerning the effect on attitudes of interminority contact (Williams, 1964), (Allport and Kramer, 1946). A similar lack of agreement exists with respect to the influence of sex on ethnic attitudes (Chadwick-Jones, 1962), (Jones and Lambert, 1959). The influence of belonging to different ethnic groups (Triandis and Vassiliou, 1967), (Shuval, 1962), (Jones and Lambert, 1959) appears to be undetermined and should be studied further. In view of the fact that only one (Schild, 1962) of the twelve studies reported an attempt to distinguish between the contact frequency and contact quality, this would seem to be a legitimate focus of further research and will be pursued in the present study.

#### Contact Involving Children - School Settings

Most of the research on contact involving children in school settings has focused on the effect of having classmates from another ethnic group. A limited number have focused on the effect of having a teacher from another ethnic group.

Jansen and Gallagher (1966) studied the sociometric choices of 100 elementary pupils in racially integrated classes for culturally disadvantaged, talented white and Negro children in Illinois. The subjects were asked to name the classmates with whom they would like to work, sit and play. Substantial cross racial choices were found among the subjects. Of the eight comparisons possible for choosing within and outside their own racial group, two reached statistical significance at

$<0.01$  and one at  $<0.05$  level using chi square. The investigators concluded that greater social contact had resulted in more empathy and understanding. It must be recognized, however, that the results may have been biased by the fact that the median I. Q. of these subjects as measured by the Stanford-Binet intelligence test was between 110 and 119.

An unpublished study done in 1961 in New York City by Singer is reported by Harding et al. (1969:49). The racial attitudes of white pupils in two grade 5 classes in neighboring suburbs were compared. One class attended a school which had been integrated for 13 years, while the other class attended an all-white school. Harding et al. report

Children in the integrated school showed significantly more positive and fewer negative stereotypes about Negroes than did those in the all-white school; indicated a greater desire for personal contact with Negroes; and finally, exhibited more familiarity with and greater positive affect toward Negro celebrities.

A weakness of this study is the very small sample which was involved.

Campbell (1958) gave a specially-prepared questionnaire to determine attitudes toward Negroes held by 746 white high school students just before, and six months after school integration in southern United States. Friendship with Negroes and attendance in a large number of classes with Negroes were the specific contact variables studied. Campbell found a relationship significant at the  $<0.05$  level between friendship and favorable attitude change. He found no significant relationship between attendance in classes and favorable attitude change.

A similar study was done with 115 white and 97 Negro junior high school students in California by Webster (1961). A nine-point social acceptance scale similar to the Bogardus Social Distance Scale was

constructed and administered along with a sociometric friendship questionnaire. Using a six-month time lag between administration of the pre- and post-tests Webster found that the attitudes of the white students had become less favorable. The change was significant at the  $<0.05$  level. Negro attitudes toward whites moved to the extremes, both favorable and unfavorable, although most became more favorable. Again the level of significance was  $<0.05$ . The results may have been influenced by the fact that the subjects continued to live in racially segregated areas.

Lombardi (1962) obtained results showing no significant difference in attitudes toward Negroes held by white junior and senior high school students in Maryland based on questionnaires given before, and nine months after integration. The questionnaire was a modified form of the Attitude Toward the Negro Scale. For comparison purposes, Lombardi had a control group of 79 students who had no class contact with Negroes. There were no significant changes in this group either. Student attitude changes in the experimental group were found to be correlated only with the educational level of the subject's mother.

It is questionable whether six or nine months experience in an integrated situation is sufficient to expect significant attitude change. The Campbell, Webster and Lombardi studies might all have been improved by allowing at least one year between administration of the pre- and post-tests.

A study done by Campbell and Schrader in 1961 is reported by Simpson and Yinger (1965:508). The attitudes of an unspecified number of junior and senior high school students were determined before and twelve

months after integration of classes in Tennessee. Four scales measuring anti-minority attitudes were employed. Campbell and Schrader found that attitudes had become significantly less favorable as a result of contact. There is no information given as to the community attitude toward integration of classes. If, as in many southern states, the decision to integrate classes was not a local one and did not have local support, it may be that the community attitude was unfavorable. This would probably influence the findings.

A study of the relationship between ethnic attitudes and the variables of age and contact was conducted in New Zealand by Vaughan and Thompson (1961). The attitudes toward Maoris held by 120 white children aged 8, 12 and 16 were determined by means of a picture story technique. Pictures depicting whites and Maoris in various situations were shown to the subjects who were asked to tell a story about them. The subjects' reactions were rated as generally favorable, neutral or unfavorable. Each age group was divided into high contact and low contact subgroups on the basis of residential proximity. The investigators found no significant difference between high contact and low contact subjects in the 8 and 12-year age groups. At the 16-year level, however, the low contact subjects made significantly more unfavorable responses than the high contact subjects. The level of significance obtained was  $<0.001$ .

In two separate studies conducted by Aboud and Taylor (1971), English Canadian and French Canadian subjects, varying in the amount of contact they had had with the other ethnic group, were asked to rate the two ethnic concepts English Canadian and French Canadian, the role

concepts student, teacher, male and female as well as combinations of all of them. A semantic differential instrument was used. Subjects were asked to indicate their frequency of contact on a continuum from "never" to "very frequently" for 24 contact situations. The first study involved 46 French Canadian students from Quebec and 46 English Canadian students from Ontario. Aboud and Taylor found correlations of 0.56 and 0.63 for English and French Canadian impressions of the role of teachers and students. Correlations of only 0.35 and 0.36 were found with respect to ethnic concepts.

The second study involved 67 adults, 33 from Toronto and 34 from Montreal. It was found that English and French Canadian males were rated similarly ( $r = 0.43$ ), as were both female concepts ( $r = 0.74$ ) by the contact group but not by the no-contact group ( $r = 0.02$  and  $r = 0.30$ ). Aboud and Taylor report that in both studies role concepts were used more frequently to rate ingroup combinations, while ethnic concepts were used more frequently to rate outgroup combinations. They concluded that ". . . contact with an ethnic group results in less reliance on ethnic cues and a corresponding increase in the use of role stereotypes." (Aboud and Taylor, 1971:26). In terms of intergroup attitudes, the investigators suggest that such a change results in more favorable attitudes since the expectations of role stereotypes are more likely to be shared by occupants of the role than are ethnic stereotypes.

Amir (1969:327) reports a study done by James in England in 1955. The effect of two black African teachers on the attitudes of white elementary school children was investigated. Information on the size of the sample, the measures used, and the statistical significance of the

findings was not provided by Amir. A pre-test to determine attitudes toward Negroes was administered. Following this the two Negro teachers taught for several weeks, and a post-test was administered. It was found that the children's attitudes grew more favorable toward black Africans in general as a result of the contact. The investigator noted that the atmosphere in the community was one of co-operation between teachers and pupils, and Negroes and whites. The status of teachers in the community was considered to be high.

Six of the nine studies reviewed in this section focused on the effect on ethnic attitudes of classroom contact only. Johnson and Gallagher (1966), Singer (1964) and Campbell (1958) report favorable changes in attitude. Campbell and Schrader (1961) report unfavorable changes while Lombardi (1962) reports no significant difference. Webster (1961) reports conflicting results. In view of the fact that the findings are inconclusive, the need for further research is indicated. Such research should include, as does the present study, an investigation of contact situations other than classroom contact alone.

#### Contact Involving Children - Non-School Settings

The research dealing with contact involving children in non-school settings appears to be limited and inconclusive. There are studies showing favorable and unfavorable effects on attitudes, as well as some which show qualified results, and others which show no significant difference.

Yarrow, Campbell and Yarrow (1958) studied the effect of two-week summer camps on 1100 American white children aged 9 to 13 in both

segregated and desegregated settings. Data was gathered using several different methods. Subjects were observed and specific items of behavior were recorded. Judgments of the members of the other ethnic group were obtained using sociometric choices and the guess who technique. It was found that the children in the desegregated groups reported more interracial friendships and more desire for interracial friendships than the children in the segregated groups. The investigators state that the difference was significant but do not report at what level.

Sherif (1958) studied attitude change at summer camps among 12-year-old boys from different ethnic backgrounds. Groups were formed experimentally, tension and conflict were introduced deliberately and an attempt was made to reduce intergroup conflict. Observations were made and results were checked by sociometric devices as well as questionnaires on ingroup-outgroup stereotypes. Sherif found that friendship preferences for outgroup members increased from 0 to 23% in one group and from 0 to 36% in another group. Using a chi square test, these differences were found to be significant at the  $<0.05$  and  $<0.001$  levels respectively.

Two studies by Wolf which are reported by Amir (1969:326) demonstrate the extent to which contact with different ethnic groups produces different kinds of results. The attitudes of German students aged 13 to 15 and 17 to 18 toward French and Italian people were determined and were related to the amount of contact which they had had with French and Italian people. It was found that increased contact with French people resulted in more favorable attitudes, while increased contact with Italians resulted in less favorable attitudes. The

investigator speculated that the findings were a result of the difference in status between these two ethnic groups as viewed by Germans.

Johnstone (1965) did an extensive study on the attitudes of 1365 Canadian young people aged 13 to 20 toward English-French bilingualism as part of the research for the Royal Commission on Bilingualism and Biculturalism. If it is assumed that attitudes of non-Francophones toward bilingualism may be interpreted as reflecting attitudes toward Francophones, this study has direct application to the problem under investigation. Data was collected by means of a self-administered questionnaire mailed to a random sample of young people. The return rate was 66.6%. Amount of contact and commitment to bilingualism was one of the relationships studied. Four types of contact were considered: daily language exposure, residential contacts, contacts at school and close personal friends. The Q coefficients for English-speaking subjects from provinces other than Quebec between commitment to bilingualism and each of the four types of contact were +0.53, +0.10, +0.10 and +0.14 respectively. The same correlations for English-speaking subjects in Quebec ranged from +0.28 to +0.32. A sex difference with respect to commitment toward bilingualism was found among English-speaking subjects. High commitment scores were obtained by 55% of the girls compared with only 39% of the boys.

Of the 25 studies related to direct contact which are reviewed in this chapter, 15 were conducted in the United States, three in Canada, two in Great Britain, two in Continental Europe, two in Israel, and one in New Zealand. Nine studies dealt exclusively with Negro-white contact. It must be recognized that it would be grossly misleading to suggest any



simple connection between the American and Canadian situations. There are similarities such as the opportunity for interaction between ethnic groups, but there are also major differences such as that posed by skin color.

The first observation which can be made about the relationship between attitudes and contact as demonstrated in the studies reviewed is that contact usually has some effect on attitudes, although not always in the expected direction. For example, six studies involving children as classmates in school settings have produced contradictory results.

Most research in this area has focused on contact between majority groups and minority groups. There is a need for study of contact involving two or more minority groups.

A number of tentative generalizations seem to derive logically from the research reviewed. There would appear to be a personality type which is associated with intolerant attitudes toward ethnic groups (Adorno et al., 1950). Contact with people who hold favorable or unfavorable attitudes is probably an important determinant in the development of attitudes toward ethnic groups (Pettigrew, 1958), (Wolf, 1961).

With respect to direct experience, residence proximity provides opportunity for intimate contact and more favorable attitudes except where the status characteristics of the interacting groups prevent favorable attitude change (Shuval, 1962). Casual contact, in which members of the groups cannot come to know each other as individuals, does not result in more favorable attitudes (Irish, 1952). Attending school classes with

members of another ethnic group does not in itself provide enough intimate contact to result in more favorable attitudes. Equal-status contact is more likely to result in favorable attitudes than contact between members of socially inferior and socially superior groups (Allport and Kramer, 1946). There is some evidence that contact with high-status members of a minority group results in more favorable attitudes on the part of members of the majority group (James, 1955). Co-operative participation between the interacting groups is likely to result in more favorable attitudes. A related generalization is that the absence of superordinate goals may result in increased hostility and tension (Sherif, 1958). Voluntary contact such as friendship and membership in clubs or on teams is more likely to result in favorable attitudes than non-voluntary contact such as work, or attendance in school classes (Jones and Lambert, 1959). The effect on attitudes of visiting another country or part of a country is not at all conclusive (Reigrotski and Anderson, 1959), (Smith, 1950).

Allport (1954:267) effectively summarizes the major findings as follows:

Prejudice (unless deeply rooted in the character structure of the individual) may be reduced by equal status contact between majority and minority groups in the pursuit of common goals. The effect is greatly enhanced if this contact is sanctioned by institutional supports (i.e., by law, custom or local atmosphere), and if it is of a sort that leads to the perception of common interests and common humanity between members of the two groups.

The present study will attempt to investigate more fully than previous studies involving school students, the relationship between attitudes and the quality and frequency of contact. In addition, the

effect on attitudes of contact between minority ethnic groups in the Western Canadian context will be investigated. Finally, the relationship between sex and attitudes toward Francophones will be studied.

## CHAPTER III

### DESIGN AND PROCEDURES

The problem under study is whether high contact, as compared with low contact with Francophones, is significantly related to the attitudes held by non-Francophone students toward Francophones.

### THE SAMPLE

In order to test the hypotheses it was necessary to determine attitudes toward Francophones held by non-Francophone students who have contact with Francophones ranging from high to low contact. The most reliable method of obtaining such a sample was to select two communities: one in which the percentage of Francophones in the population is known to be large, and another in which the percentage of Francophones in the population is known to be very small. This assumes of course that other factors such as socio-economic level are equal in the communities.

Three Alberta towns were selected, two of which have a large percentage of Francophones. These towns will be designated only as Town X, Town Y and Town Z. They will not be named because the subjects were advised that their town would remain anonymous in the research report. This procedure was followed with the expectation that some subjects might answer less defensively and more honestly if such assurances were given.

Table I presents the ethnic origin of the population of the

TABLE I  
ETHNIC ORIGIN OF THE POPULATION OF THE THREE TOWNS

	Town X	Town Y	Town Z
British Isles	154 (16%)	311 (11%)	1533 (63%)
French	600 (64%)	1580 (56%)	89 (4%)
German	59 (6%)	131 (5%)	258 (11%)
Italian	4	1	---
Jewish	---	---	1
Netherlands	12	16	59
Polish	8	58	81
Russian	---	4	10
Scandinavian	2	69	159 (7%)
Ukrainian	18	533 (19%)	181 (7%)
Other European	68 (7%)	70	65
Asiatic	2	34	9
Indian	8	16	---
Other	---	---	4
	<u>935</u>	<u>2823</u>	<u>2449</u>

\*As reported in Ethnic Groups, Counties and Sub-divisions, The 1961 Census of Canada, Series SP, Population, Dominion Bureau of Statistics, 1961.

three towns as reported by the 1961 Federal Government Census. It should be noted that most of the grade 11 students included in the sample were in grade 2 the year in which this census was taken.

A total of four high schools from the three towns were involved in the study. These will be designated as School A, School B, School C, and School D. Schools A and B are located in Towns X and Y respectively. Schools C and D are both located in Town Z. All four schools are rural centralized high schools serving north-central Alberta communities in which mixed farming is the principal occupation.

Data on the population of the towns, the school population and the grade 11 population are presented in Table II.

Table III presents the number of Francophone and non-Francophone students who completed the questionnaire. It should be noted that all grade 11 students present at the time of the administration of the questionnaire were asked to complete it. For the purposes of the study, however, only the data obtained from non-Francophone subjects were included. Table III indicates that a total of 204 non-Francophone subjects were included.

Information on the sex and age of the subjects is provided in Table IV and Table V respectively. Table VI indicates how many of the subjects were currently enrolled in French. The languages understood and spoken by the subject himself, by the subject's father, and by the subject's mother are presented in Tables VII, VIII, and IX. The discrepancy in totals with respect to the latter three tables is explained by the fact that some of the subjects' fathers or mothers are deceased.

TABLE II  
DATA ON THE SCHOOLS

School	Town Population*	Senior High School Population	Grade 11 Population
A	1251	108	36
B	4131	612	185
C	2949	305	111
D	2949	78	20

\*Annual census, Department of Municipal Affairs, Government of the Province of Alberta, 1972.

TABLE III  
 NUMBER OF FRANCOPHONES AND NON-FRANCOPHONES WHO  
 COMPLETED THE QUESTIONNAIRE

	Francophones	Non- Francophones	Total
School A	15	11	26
School B	82	83	165
School C	5	95*	100
School D	1	16	17
	<u>103</u>	<u>205*</u>	<u>308</u>

\*One questionnaire was spoiled. The total non-Francophone sample was therefore 204.



TABLE IV  
SEX OF THE SUBJECTS

	School A	School B	School C	School D	Totals
Male	7	44	45	7	103
Female	4	39	49	9	101

TABLE V  
AGE OF THE SUBJECTS

	School A	School B	School C	School D	Totals
15	-	5	--	-	5
16	5	43	58	9	115
17	5	31	29	6	71
18	1	4	7	1	13

TABLE VI  
SUBJECTS CURRENTLY ENROLLED IN FRENCH

	School A	School B	School C	School D	Totals
Yes	1	27	18	8	54
No	10	56	76	8	150

TABLE VII  
LANGUAGES UNDERSTOOD AND SPOKEN BY THE SUBJECTS

	School A	School B	School C	School D
English only	10	52	86	11
English and Ukrainian		21	5	3
English and German	1			1
English and Cree		8		
English and other		2	2	1
English, Ukrainian and other			1	
Totals	11	83	94	16

TABLE VIII  
LANGUAGES UNDERSTOOD AND SPOKEN BY THE SUBJECTS' FATHERS

	School A	School B	School C	School D
English only	5	23	68	6
English and Ukrainian	1	37	10	4
English and German	5	2	1	2
English and Cree		8		
English and French			2	
English and other		2	8	4
English, Ukrainian and other		6	3	
English, German and other				
English, Cree and Ukrainian		1		
English, German and Ukrainian				
English, French and Ukrainian		2		
English, French and German				
English, French and other				
English, German, Ukrainian and other		1	1	
Other			1	
Totals	11	82	94	16

TABLE IX  
LANGUAGES UNDERSTOOD AND SPOKEN BY THE SUBJECTS' MOTHERS

	School A	School B	School C	School D
English only	5	26	69	9
English and Ukrainian	1	37	15	4
English and German	1	2	2	2
English and Cree		8		
English and French	1			
English and other		5	3	1
English, Ukrainian and other		1	3	
English, German and other			1	
English, Cree and Ukrainian		1		
English, German and Ukrainian		1		
English, French and Ukrainian	1			
English, French and German	1	1		
English, French and other	1			
English, German, Ukrainian and other				
Other			1	
Totals	11	82	94	16

Two considerations influenced the selection of grade 11 as the level to be studied. First, there is some evidence (Wilson, 1963) that attitudes toward ethnic groups become stabilized only in late adolescence. As indicated in Table III, the subjects ranged in age from 15 to 18, with the majority being 16 years old. Second, grade 12 would have provided an older sample but there were administrative reasons for not selecting this grade level. Since grade 12 students write final departmental examinations, encroachment on their instructional time is not encouraged.

#### INSTRUMENTATION

Some measure of attitudes toward Francophones and amount of contact with them was necessary. An adapted version of the French Attitude Scale developed by Lambert et al. (1961) was employed. In addition, measures of the subjects' general rejection of outgroups and degree of authoritarianism were obtained by administering selected items of the Ethnocentrism Scale and the California F Scale (Adorno et al., 1950). The contact items were developed especially for the study. The instrument comprised 72 items divided into two sections: (1) 41 items from attitude and psychological scales, and (2) 31 items on personal data and extent of contact. The complete instrument is presented in Appendix A.

A classification of the questionnaire items according to sub-groupings is provided in Table X. It will be noted that the items from the three scales were randomly dispersed among the first 51 items. This was done to discourage the development of a response set on the part of

TABLE X  
CLASSIFICATION OF QUESTIONNAIRE ITEMS  
ACCORDING TO SUBGROUPINGS

	Item Number
French Attitude Scale	1, 2, 5, 7, 8, 10, 13, 14, 15, 17, 18, 20, 21, 24, 26, 28, 33, 37, 38, 41
E Scale	6, 11, 16, 19, 22, 25, 36
F Scale	3, 4, 9, 12, 23, 27, 29, 30, 31, 32, 34, 35, 39, 40
Personal Data	42 - 50 inclusive
Contact	51 - 72 inclusive

the subjects.

The instrument is discussed in detail in the following sections.

### French Attitude Scale

The French Attitude Scale developed by Lambert et al. (1961) and presented in Jakobovits (1970:263-264) consists of twenty positively-worded statements about French-speaking people. The original scale is presented in Appendix B. The wording of five of the items was changed slightly to remove ambiguity or to adapt the item to local conditions. For example, items 12, 15, 16 and 19 as originally worded imply that French-speaking people are not really Canadians. Item 12 was worded as follows: "Canadian children can learn much of value by associating with French-speaking playmates." (Jakobovits, 1970:263). This item was changed to "Canadian children whose first language is not French can learn much of value by associating with French-speaking playmates." A similar change was made in item 15.

The word English was inserted immediately before the word Canadian in items 16 and 19. The revised wording for item 16 is "It is wrong to try to force the French-speaking person to become completely English-Canadian in his habits."

Item 18 in Jakobovits (1970:264) states "London would be a much better city if more French-speaking people would move here." In view of the fact that the questionnaire was to be administered in three different towns, a more general statement was developed without destroying the intent of the original. Thus the item is worded "Our town would be a much better town if more French-speaking people were to



come here to live."

The subjects were asked to indicate their degree of agreement or disagreement on a six-point scale ranging from strong agreement to strong disagreement. No opportunity was provided for a "no opinion" or "undecided" answer because it was felt that some subjects who held unfavorable attitudes might wish to conceal them.

The scoring of items in the French Attitude Scale was weighted so that a high score indicated favorable attitudes toward French-speaking people. Positive responses were weighted 5, 6, and 7 points depending on the degree of agreement. Negative responses were weighted 1, 2, and 3 points depending on the degree of disagreement. The maximum score for the 20 items was 140 and the minimum score was 20.

A check on the validity of the French Attitude Scale was made by comparing the mean score of Francophones and non-Francophones in Schools A and B. It might be expected that Francophones would score higher if indeed the scale measures favorable attitudes toward Francophones. The means and variances are presented in Table XI. Table XII presents the results of a one-way analysis of variance which was performed to determine the statistical probability that the observed difference in means occurred by chance. It will be noted that the probability level " $p$ " is  $< 0.001$ . The scale appears to differentiate well between Francophones and non-Francophones. As expected, the Francophones had significantly more favorable attitudes toward Francophones, as measured by the French Attitude Scale. On this basis the validity of the scale would appear to be established.

TABLE XI  
 MEANS AND VARIANCES: FRENCH ATTITUDE SCALE SCORES  
 OF FRANCOPHONES AND NON-FRANCOPHONES  
 IN SCHOOLS A AND B

School	$\bar{X}$	Variance	(N)
School A			
Francophones	101.1	224.0	(15)
Non-Francophones	83.9	214.9	(11)
School B			
Francophones	97.6	305.0	(82)
Non-Francophones	82.1	275.7	(83)
Schools A and B			
Francophones	98.2	291.6	(97)
Non-Francophones	82.3	266.6	(94)

TABLE XII  
ANOVA: ONE-WAY ANALYSIS OF VARIANCE ON FRENCH ATTITUDE  
SCALE SCORES OF FRANCOPHONES AND NON-  
FRANCOPHONES IN SCHOOLS A AND B

Source	SS	df	MS	F	p
School A	1882.8	1	1882.8	8.55	0.007
School B	9958.	1	9958.	34.31	<0.001
Schools A and B	12019.	1	12019.	43.04	< 0.001

  

Homogeneity of variance					
School A		$\chi^2 = 0.005$		$p = 0.94$	
School B		$\chi^2 = 0.21$		$p = 0.65$	
Schools A and B		$\chi^2 = 0.19$		$p = 0.66$	

### Ethnocentrism Scale

Seven items from the Ethnocentrism Scale of Adorno et al. (1950) were slightly reworded to make them suitable for Canadians and for the year 1972. The seven items as reported by Jakobovits (1970:266) are presented in Appendix C. These items were used intact with the exception of item 2 which was modernized as follows: "In world organizations such as the United Nations, Canada must be sure that she loses none of her independence and complete power as a sovereign nation."

The Ethnocentrism scale purports to measure rejection of out-groups in general. As with the French Attitude Scale, subjects indicate their degree of agreement or disagreement with each item on a six-point scale. The maximum score is 49 and the minimum is 7. A high score presumably indicates a strong suspicion of foreign people and ideas, and a high rejection of outgroups in general.

With respect to validity, Shaw and Wright (1967:403) report that the authors of the Ethnocentrism Scale found that it would

. . . differentiate known groups such as penitentiary inmates, female extension-class students, psychiatric clinic women, psychiatric clinic men, and working-class men and women.

Shaw and Wright state that the validity of the scale has been questioned for two reasons. The first reason is the attempt to measure such a broad concept as ethnocentrism as it was defined by the authors. The second reason is that all of the items are stated negatively and response set may result. In the present study the seven items from the Ethnocentrism Scale are randomly distributed among the items from the other two scales in order to discourage response set.

Shaw and Wright (1967:403) report a reliability coefficient of 0.79 for the whole Ethnocentrism Scale. The reliability coefficient for a number of selected items might, however, differ considerably.

#### California F Scale

The F Scale, developed by Adorno et al. (1950), purports to measure authoritarian or undemocratic tendencies. The significance of this personality characteristic with respect to unfavorable attitudes toward ethnic groups was noted in Chapter II.

Fourteen items were selected from Forms 45 and 40 of the Adorno et al. (1950) scale. Selection was made on the basis of relevance to Canadian adolescents in the year 1972. The items are presented in Appendix D. No changes were introduced into these items.

Completion and scoring of this scale are the same as for the first two scales. The maximum total score is 98 and the minimum is 14. A high score presumably indicates an authoritarian, anti-democratic tendency.

The average of the reliability coefficients for the F Scale is 0.90, ranging from 0.81 to 0.97 (Adorno et al., 1950:257). It should be noted that these coefficients apply to the whole scale. The reliability coefficient derived as a result of the use of only 14 items might be different.

#### Personal Data

Subjects were not asked to give their names. They were, however, asked to give information with respect to their age and sex, as well as

the languages understood and spoken by themselves and by their father and mother.

### Contact

Information with respect to the kind and extent of contacts with Francophones was necessary. In view of the fact that no instrument was available for this purpose, a questionnaire was developed specifically for the study.

A careful study of previous research revealed many different types of contact which ought to be included. Table XIII presents those contact situations about which information was sought.

Quality and frequency were identified as two distinct factors involved in assessing the importance of contact relative to attitudes. The quality of a contact situation refers to the possibility for intimate contact provided within that situation. It refers to the extent to which participants can come to know each other as individuals. Having a very good Francophone friend, living in a town where French is spoken, or visiting an area where French is spoken, are not of equal value insofar as contact quality is concerned.

In order to establish a relative value for the quality of each of the sixteen contact situations, three professors and two graduate students were asked to assign a weighting of high, medium or low to each of the situations. These were then compared with the weightings chosen by the investigator. The average inter-judge reliability among the six judges was found to be 0.71. Table XIV presents the weighting assigned to each contact situation.

TABLE XIII  
CONTACT SITUATIONS INCLUDED IN THE INSTRUMENT

Item Number		Type of Contact
1.	51	Residence in a community with Francophones
2.	54	Study of the French language in school
3.	55	Personal acquaintance with Francophones
4.	56	Personal acquaintance with Francophone families
5.	57	Very close Francophone friend
6.	59	Membership in clubs, groups or teams which include Francophones
7.	60	Francophone teachers
8.	61	Visit to Francophone homes
9.	62	Attendance at school with Francophones
10.	64	Francophone guest speakers at school
11.	65	Francophone neighbors
12.	67	Personal acquaintance with high-status Francophones
13.	69	Visit to Francophone businesses or schools
14.	70	Staying over night in Francophone homes
15.	71	Portion of leisure time spent with Francophones
16.	72	Visit to a Francophone area or country

TABLE XIV  
WEIGHTING ASSIGNED FOR CONTACT QUALITY

Contact Situation		Weight- ing
1.	Residence in a community with Francophones	2
2.	Study of the French language in school	1
3.	Personal acquaintance with Francophones	2
4.	Personal acquaintance with Francophone families	3
5.	Very close Francophone friend (s)	3
6.	Membership in clubs, groups or teams which include Francophones	2
7.	Francophone teacher (s)	2
8.	Visit to Francophone home (s)	3
9.	Attendance at school with Francophones	2
10.	Francophone guest speaker (s) at school	1
11.	Francophone neighbors	2
12.	Personal acquaintance with high-status Francophones	1
13.	Visit to Francophone businesses or schools	1
14.	Stay over night in Francophone home (s)	3
15.	Portion of leisure time spent with Francophones	3
16.	Visit to a Francophone area or country	1

\*Low quality = 1; Medium quality = 2; High quality = 3



Each subject was assigned a score for the quality of contact for each contact situation. For residence, subjects in attendance at School A or School B were assigned a score of 2. Subjects from Schools C or D were assigned a score of 0 for this particular contact situation. A score of 1 or 0 was assigned, dependent upon whether or not the subject had ever studied the French language in school. Each subject's total score for quality of contact was then determined by adding the 16 separate scores. The total score could range from 0 to 32.

Frequency of contact refers to how often or how long the contact occurred, or to how many Francophones or Francophone organizations were involved. It is recognized that there is probably a difference in the importance of frequency as a factor in determining attitudes between living in a community with Francophones for one year or for ten years. Similarly, knowing one Francophone is probably not of the same significance as knowing six Francophones. Accordingly, a relative weighting must be assigned in order to quantify the frequency factor.

The same group of judges were requested to assign a weighting of high, medium or low to each of the possible responses for the sixteen contact situations. These weightings were compared with those assigned by the investigator. The average inter-judge reliability was 0.74. Table XV presents the relative weighting assigned for contact frequency.

Each subject was assigned a score for contact frequency for each contact situation. For example, if he reported having had Francophone neighbors for one to three years, a score of 1 was assigned. However, if he reported have had Francophone neighbors for four to five years, a score of 2 was assigned. The sixteen contact frequency scores were

TABLE XV  
WEIGHTING ASSIGNED FOR CONTACT FREQUENCY

Contact Situation		Weighting For Each Response				
		A	B	C	D	E
1.	Residence in a community with Francophones	1	1	2	3	3
2.	Study of the French language in school	0	1	2	3	3
3.	Personal acquaintance with Francophones	0	1	2	3	3
4.	Personal acquaintance with Francophone families	0	1	2	3	3
5.	Very close Francophone friend(s)	0	1	2	3	
6.	Membership in clubs, groups, or teams which include Francophones	0	1	2	3	3
7.	Francophone teacher(s)	0	1	2	3	3
8.	Visit to Francophone home(s)	0	1	1	2	3
9.	Attendance at school with Francophones	0	1	2	3	3
10.	Francophone guest speaker(s) at school	0	1	2	3	
11.	Francophone neighbors	0	1	2	3	3
12.	Personal acquaintance with high-status Francophones	0	1	2	3	3
13.	Visit to Francophone businesses or schools	0	1	2	3	
14.	Stay over night in Francophone home(s)	0	1	2	3	3
15.	Portion of leisure time spent with Francophones	0	1	2	3	
16.	Visit to Francophone area or country	0	1	1	2	

totalled to obtain the subject's total frequency score which could range from 0 to 48.

The subjects' total contact score was obtained by adding the total scores for contact quality and contact frequency. Total contact scores could range from 0 to 80.

#### PILOT STUDY

In order to test the basic design of the study and to determine whether the questionnaire was comprehensible to students, a pilot study was conducted with all of the grade 11 students at School A on February 15, 1972. The investigator administered the questionnaire to 26 subjects: 15 Francophones and 11 non-Francophones.

The subjects were invited to write their reaction to the questionnaire and suggestions for its improvement on the back of their answer sheet. Following the completion of the questionnaire, the investigator invited comments and questions from the subjects.

The results of the pilot project demonstrated that the design of the study was tenable. In addition, it was found that grade 11 students would have no difficulty in understanding the instrument. Certain minor changes to Section 2 were found to be necessary. For example, the two questions pertaining to the first language learned by the subject's mother and father were added in order to distinguish more clearly Francophone and non-Francophone subjects.

In view of the fact that no major revision was necessary, relevant data from the pilot study were incorporated into the main study.

### DATA COLLECTION

Permission to administer the questionnaire in the schools was obtained from the superintendents involved. Details such as date, time, and manner of administration were arranged with the principals.

The instrument was administered in Schools C and D on March 14, 1972, and in School B on March 15, 1972.

The subjects were each provided with a questionnaire booklet plus an answer sheet. They were instructed to circle the letter of the response which most accurately reflected their attitude or their experience with Francophones.

In each school the subjects were asked by the investigator to answer carefully and honestly. They were reminded that their own opinion was being solicited, not that of their parents, their teachers or their friends.

There was a minor variation in the physical administration of the instrument in the schools. In Schools B and D, all of the subjects were assembled in one location, while in School C they were dispersed in five rooms under the supervision of the regular classroom teacher.

### TABULATION OF DATA

Upon completion of the data collection, an identification number was assigned to each questionnaire. The responses were then transferred to IBM cards.

Total scores for each subject were calculated by computer for each of the following: French Attitude Scale, Ethnocentrism Scale,

California F Scale, contact quality, contact frequency, and total contact. New cards were generated by computer recording the above scores in preparation for further statistical treatment.

#### STATISTICAL TREATMENT OF THE DATA

Existing computer programs from the Division of Educational Research Services at the University of Alberta were used in the analysis of the data. Analyses were as follows:

1. Two-way analyses of variance (fixed effects model) with scores from the French Attitude Scale, the Ethnocentrism Scale and the California F Scale as the criterion measures were carried out by means of the ANOV25 program (Bay:1969) of the DERS Library. This procedure was used to determine whether the subtest means of the sample subgroups differed significantly. Analysis of variance (Spence, 1968:15) provides

. . . an objective criterion for deciding whether the variability between groups is large enough in comparison with the variability within groups to justify the inference that the means of the populations from which the different groups were drawn are not the same.

A probability level "p" of less than 0.05 ( $p < 0.05$ ) is interpreted as being statistically significant and the null hypothesis is rejected. A probability level "p" of more than 0.05 is interpreted as being non-significant, and the null hypothesis is not rejected.

Three two-way analyses of variance were conducted as follows: contact by sex, contact by study of French, and sex by study of French.

2. Chi square contingency tables using the NONP~~0~~2 program

(Precht, Burnett:1969) of the DERS Library were set up on the following variables: language spoken by the subject, language spoken by the father of the subject and language spoken by the mother of the subject. Observed and expected frequencies were compared to determine significant differences. Chi square was used because the frequencies in some of the cells were less than the 30 required in a two-way analysis of variance.

Siegel (1956:175) describes the use of chi square as follows:

When frequencies in discrete categories (either nominal or ordinal) constitute the data of research, the  $\chi^2$  test may be used to determine the significance of the differences among K independent groups. The  $\chi^2$  test for K independent samples is a straightforward extension of the  $\chi^2$  test for two independent samples.

In discussing the application of chi square to an hypothesis,

Siegel (1956:104) states

The hypothesis under test is usually that the two groups differ with respect to some characteristic and therefore with respect to the relative frequency with which group members fall into several categories. To test this hypothesis, we count the number of cases from each group which fall in the various categories, and compare the proportion of cases from one group in the various categories with the proportion of cases from the other group.

If the probability of a high chi square is 0.05 or less, the differences in the frequency of responses are deemed to be significant.

Chi square was employed to determine whether there were significant differences in French Attitude Scale scores among subjects who speak English only, and English and another language. The effect of languages spoken by the parents of the subject were similarly studied.

3. Pearson product-moment correlations among the 16 contact

variables and the French Attitude Scale scores were computed using the DEST02 program (Precht, Muir:1969) of the DERS Library. This procedure is used to determine whether there is a significant linear correlation between two variables.

## CHAPTER IV

### RESULTS AND DISCUSSION

The aim of the study is to determine whether high contact with Francophones, as compared with low contact is related to the attitudes toward Francophones held by non-Francophone students. In addition, the relationships between attitudes toward Francophones and sex, the study of French, and languages spoken by the subject and his parents will be studied.

The presentation of the results of the data analysis will be organized into two sections. The first will include group comparisons on the basis of sex, contact and study of French. The second will include comparisons on the basis of languages spoken by the subjects and his parents.

#### GROUP COMPARISONS ON SEX, CONTACT AND STUDY OF FRENCH

##### Hypothesis 1

There is no significant difference between the French Attitude Scale scores obtained by non-Francophone students who have had high contact with Francophones and non-Francophone students who have had low contact with Francophones when compared on the basis of sex and no interaction.

In order to test this hypothesis, two groups with distinctly different contact experience with Francophones were required. A total contact score was obtained for each of the 204 subjects by adding the



scores for contact quality and contact frequency. The distribution of these scores is presented in Table XVI. It will be observed that this distribution is bimodal. A decision was made to delete the 17 subjects with total contact scores ranging from 33 to 42. This left a total of 119 subjects in the low contact group with scores ranging from 0 to 32. The high contact group consisted of 68 subjects with scores ranging from 43 to 72.

The means and variances for each of the three criterion measures for the high contact group, the low contact group, and the total group are presented in Table XVII. This table will be considered further when Hypothesis 1a is discussed.

Table XVIII presents the means and variances for each of the three criterion measures for the high and low contact groups when compared on the basis of sex and study of French. Hypothesis 1 states that there will be no relationship between French Attitude Scale scores and the variables of sex and amount of contact with Francophones. The mean scores for low contact males and females were 80.5 and 89.7 respectively, while for high contact males and females the mean scores were 80.8 and 86.6.

The relevant data from the two-way analysis of variance are presented in Table XIX. The difference between male and female scores on the French Attitude Scale was found to be significant at the 0.007 level of confidence. No significant relationship between contact and French Attitude Scale scores was found. Furthermore, no significant interaction was found between sex and contact.

The finding that female subjects in the present study were

TABLE XVI  
DISTRIBUTION OF SUBJECTS BY TOTAL CONTACT SCORE

Total contact score	Mid-point of interval	Frequency	Cumulative frequency
63-72	67.5	9	204
53-62	57.5	21	195
43-52	47.5	38	174
33-42	37.5	17	136
23-32	27.5	22	119
13-22	17.5	28	97
3-12	7.5	59	69
0- 2	1	10	10
Total		204	

TABLE XVII  
MEANS AND VARIANCES FOR TOTAL, HIGH CONTACT, AND LOW CONTACT GROUPS

	Total Group	(N)	High Contact	(N)	Low Contact	(N)
French Attitude Scale $\bar{X}$ Variance	84.5 342.2	(187)	83.5 254.9	(68)	85.1 393.7	(119)
Ethnocentrism Scale $\bar{X}$ Variance	25.8 34.8	(187)	25.7 34.	(68)	25.8 35.5	(119)
California F Scale $\bar{X}$ Variance	65.3 120.1	(187)	63.6 127.9	(68)	66.2 114.2	(119)

TABLE XVIII  
MEANS AND VARIANCES: SCALES AND SCORES OF HIGH AND LOW CONTACT  
NON-FRANCOPHONES COMPARED BY SEX AND STUDY OF FRENCH

	Male	(N)	Female	(N)	French	(N)	No French	(N)
<b>French Attitude Scale:</b>								
Low Contact $\bar{X}$	80.5	(60)	89.7	(50)	96.	(24)	82.3	(95)
Variance	367.9		383.5		279.9		387.8	
High Contact $\bar{X}$	80.8	(37)	86.6	(31)	85.3	(24)	82.5	(44)
Variance	263.		235.1		248.2		261.6	
<b>Ethnocentrism Scale:</b>								
Low Contact $\bar{X}$	27.1	(60)	24.5	(59)	24.	(24)	26.3	(95)
Variance	32.7		35.6		29.4		36.2	
High Contact $\bar{X}$	27.3	(37)	23.9	(31)	24.1	(24)	26.6	(44)
Variance	31.3		31.9		37.1		30.9	
<b>F Scale:</b>								
Low Contact $\bar{X}$	66.1	(60)	66.4	(59)	63.4	(24)	67.	(95)
Variance	134.7		95.4		109.8		114.	
High Contact $\bar{X}$	64.3	(37)	62.9	(31)	59.9	(24)	66.2	(44)
Variance	125.3		134.2		140.		105.3	74

TABLE XIX

ANOVA: TWO-WAY ANALYSIS OF VARIANCE ON FRENCH ATTITUDE SCALE SCORES  
FOR SEX AND CONTACT VARIABLES

Source	SS	df	MS	F	p
A: Sex	2397.	1	2397.	7.2	0.007
B: Contact	84.	1	84.	0.25	0.61
AB	126.	1	126.	0.38	0.54
Error	60469.	183	330.4		

Homogeneity of variance  $\chi^2 = 0.34$

p = 0.33

significantly more favorable to Francophones was not entirely unexpected. Although Jones and Lambert (1959) found no significant difference between male and female attitudes of Canadian adults toward German and Dutch immigrants, Johnstone (1965) found that adolescent females were significantly more committed to bilingualism for Canada. Similarly, Chadwick-Jones (1962) found that the male subjects in his study in Wales were more unfavorable to Italians.

Lambert has developed a social psychological theory of second language learning which holds that "The learner's ethnocentric tendencies and his attitudes toward the other group are believed to determine his success in learning the new language." (Lambert, 1963: 114). If females are more favorable to Francophones, it might be expected that a greater percentage of them would choose to take French and to continue past the first year, other factors being equal. It might be noted that 36% of the females in the total high and low contact group were enrolled in second-year French as compared with only 17% of the males. How much of the difference in enrolment might be attributed to the difference in attitudes toward Francophones cannot be ascertained from the data of the present study. Females have traditionally been expected to opt for languages and the humanities and to excel in them while males have traditionally been expected to opt for the sciences and mathematics. This may be one of the factors distinct from attitudes toward Francophones which explains the disparity in male-female enrolment in French classes.

### Hypothesis 1a

There is no significant difference between the French Attitude Scale scores obtained by non-Francophone students who have had high contact with Francophone students and non-Francophone students who have had low contact with Francophones.

This hypothesis, which relates specifically to one of the main effects in the two-way analysis of variance, sets forth the major focus of the present study, i.e. the relationship between contact and attitudes toward Francophones. Table XVII, page 73, presents the means and variances obtained on the French Attitude Scale for the high contact subjects, the low contact subjects, and the total group. The means scores for high and low contact subjects are 83.5 and 85.1 respectively. The mean score for the total group is 84.5.

It is evident from the mean scores that high contact appears not to be directly related to favorable attitudes toward Francophones as measured by the French Attitude Scale for the subjects in the present study. This is confirmed by the data from the two-way analysis of variance as presented in Table XIX, page 75. The "p" level of 0.61 leads to failure to reject the null hypothesis for the sample in this study.

Of the 25 studies reviewed in Chapter II, 13 studies reported a positive relationship between contact and attitudes toward an ethnic group. Seven studies reported a positive relationship with some of the sample subgroups but not with others. Two studies reported a negative relationship. Only three studies found no significant difference (Jones and Lambert, 1959), (Smith, 1950), (Lombardi, 1962). It should be noted that of the three studies cited, the second one was concerned

only with contact through travel to a foreign country. Contact in the other two was defined more broadly as it was in the present study.

Speculation as to the reason for the apparent lack of relationship between contact and attitudes toward Francophones in the sample studied might begin with the difference between majority-minority relations and minority-minority relations. Referring to Canadians, Elliott (1971:1) claims that

Membership in the majority group is heavily dependent upon such physical and social attributes as white skin, English-speaking parents, and Christian ancestors who emigrated to Canada from a Western European industrial nation.

It should be noted that 85% of the high contact group is from Town Y where the two largest ethnic groups are minority groups in Canada. For the high contact group in the sample, therefore, contact is between two minority groups rather than between a majority and a minority group. Conversely, 86% of the low contact group is from Town Z where interaction is between a majority group (63% of British origin) and a number of minority groups. The subjects of British origin may feel little threat from Francophones and thus react more favorably. This difference in the majority-minority membership between the low and high contact groups might partially explain the lack of relationship found between contact and attitudes toward Francophones.

Previous research does not appear to be consistent with respect to the relationship between attitudes and contact where two minority groups are concerned. Allport and Kramer (1946) found that interaction between two disadvantaged minority groups resulted in increased tension and less favorable attitudes. However, Williams (1964) reports



favorable attitudes related to contact between two minority groups. Further reference to this factor will be made in the discussion of Hypotheses 5, 6, and 7.

A second reason why the results of the contact-attitude relationship in the present study appear to differ from the results of most previous research may be related to the definition of contact. Of the 25 studies reviewed, it would appear that only three (Williams, 1964), (Allport and Kramer, 1946), (Jones and Lambert, 1959) defined contact as broadly as in the present study. Many of the researchers focused on specific types of contact. For example, Wilner, Walkley and Cook (1952) studied residence proximity. Reigrotski and Anderson (1959) studied foreign contacts, while Campbell (1958) studied classroom contact. If contact had been narrowly defined for the present study as close friendship with Francophones, the findings might have been different.

A rather remote possibility, but one which deserves attention nonetheless, is the influence which an inordinately large number of xenophiles in the low contact group might have had on the mean French Attitude Scale score of that group. Xenophiles demonstrate the opposite reaction of ethnocentrics in relation to ingroups and outgroups. They tend to vilify the ingroup and glorify the outgroup. Unfortunately no control for this factor was employed in the present study.

#### Contact Quality and Contact Frequency Differentiation

A one-way analysis of variance was carried out to determine whether the scores for contact quality and contact frequency instead of

TABLE XX  
 PEARSON PRODUCT-MOMENT CORRELATIONS BETWEEN FRENCH ATTITUDE  
 SCALE SCORES OF HIGH CONTACT SUBJECTS AND  
 SELECTED CONTACT VARIABLES

Contact Situation	(N)	r	P
Very close Francophone friend	(68)	+0.36	0.002
Staying over night in home of Francophones	(68)	+0.27	0.02
Residence in a Francophone community	(68)	-0.30	0.01
Acquaintance with high-status francophones	(68)	-0.26	0.03

total contact score might be used in a further analysis. It was found, however, that the requirements for homogeneity of variance could not be met for the data. This indicates that one of the assumptions necessary in an analysis of variance was violated, i.e., the assumption could not be made that the means for low and high contact groups were from the same population.

#### Correlations Between Contact Variables and French Attitude Scale Scores

As a consequence of the finding that there was no significant difference between the French Attitude Scale scores of high and low contact subjects, a study of the relationship between each of the 16 contact variables and French Attitude Scale scores was carried out with the 68 subjects in the high contact group. This was based on the expectation that some of the 16 contact variables might show significant positive correlation with the French Attitude Scale scores even though total contact score did not.

Using the contact frequency score for each contact variable to indicate extent of contact with Francophones, Pearson product-moment correlations among the 16 contact variables and the French Attitude Scale scores were computed. Of the 16 correlations computed, only four were found to be significant at a level of  $p \leq 0.05$  or better. These are presented in Table XX.

Significant positive correlations were found on two variables: having very close Francophone friends (+0.36) and staying over night in the home of Francophones (+0.27). This finding appears to agree with previous research on the friendship variable (Williams, 1964), (Allport

and Kramer, 1946), (Reigrotski and Anderson, 1959), (Selltitz, 1955), (Campbell, 1958).

Significant negative correlations were found to be associated with length of residence in the community and acquaintance with high-status Francophones. The correlation of -0.30 between the length of time the subject has lived in the community and the French Attitude Scale score suggests that the social norms of the non-Francophone part of the community may reinforce an unfavorable attitude toward Francophones. Those who have lived longest in the community thus demonstrate greater conformity to the norms as a result of having been exposed longer to them. Those who have lived only a short time in the community may not have learned the social norms well enough. Pettigrew (1958) found such an influence in his research in South Africa and southern United States.

The negative correlation between acquaintance with high-status Francophones and French Attitude Scale scores is difficult to explain. It would have been expected logically that high-status Francophones would result in a transfer of admiration for the roles occupied to the ethnic group involved. This did not occur and the data suggest no explanation.

### Hypothesis 2

There is no significant difference between the Ethnocentrism Scale scores obtained by non-Francophone students who have had high contact with Francophones and non-Francophone students who have had low contact with Francophones when compared on the basis of sex and no interaction.

The means and variances for the high and low contact subjects on the Ethnocentrism Scale are presented in Table XVIII, page 74. The mean scores for low contact males and females were 27.1 and 24.5 respectively, while for high contact males and females the mean scores were 27.3 and 23.9.

Table XXI presents the data from the two-way analysis of variance. Male and female mean scores were found to be significantly different at the  $p < 0.001$  level of confidence. The hypothesis with respect to the sex main effect is therefore rejected. No significant relationship was found between contact with Francophones and scores on the Ethnocentrism Scale. Finally, no significant interaction was found between sex and contact.

The finding that males in the sample are more unfavorable to outgroups in general would appear to be consistent with the finding that they are more unfavorable to Francophones. It might be expected that unfavorable attitudes toward one ethnic group would be directly related to unfavorable attitudes toward ethnic outgroups in general.

#### Hypothesis 2a

There is no significant difference between the Ethnocentrism Scale scores obtained by non-Francophone students who have had high contact with Francophones and non-Francophone students who have had low contact with Francophones.

This hypothesis relates specifically to one of the main effects in the two-way analysis of variance. The means and variances obtained on the Ethnocentrism Scale for the high contact subjects, the low

TABLE XXI  
ANOVA: TWO-WAY ANALYSIS OF VARIANCE ON ETHNOCENTRISM SCALE SCORES FOR  
SEX AND CONTACT VARIABLES

Source	SS	df	MS	F	p
A: Sex	385.6	1	385.6	11.6	0.001
B: Contact	2.1	1	2.1	0.06	0.80
AB	8.1	1	8.1	0.24	0.62
Error	6072.6	183	33.2		

Homogeneity of variance  $\chi^2 = 0.23$

$p = 0.97$

contact subjects, and the total group are presented in Table XVII, page 73. The mean scores for high and low contact subjects are 25.7 and 25.8 respectively, while the mean score for the total group is 25.8.

Comparison of the mean scores suggests that contact appears not to be directly related to scores on the Ethnocentrism Scale. Data presented in Table XXI, page 84, confirms that contact and scores on the Ethnocentrism Scale are not significantly related. The "p" level of 0.80 leads to failure to reject the null hypothesis for the sample in the study.

It would appear that the finding that there is no significant relationship between Ethnocentrism Scale scores and contact is consistent with the finding that there is no significant relationship between French Attitude Scale scores and contact.

### Hypothesis 3

There is no significant difference between the California F Scale scores obtained by non-Francophone students who have had high contact with Francophones and non-Francophone students who have had low contact with Francophones.

Table XVIII, page 74, presents the means and variances for high and low contact males and females obtained on the California F Scale. The mean scores for low contact males and females were 66.1 and 66.4 respectively. For high contact males and females the mean scores were 64.3 and 62.9.

Data from the two-way analysis of variance is presented in Table XXII. Male and female mean scores were not found to be

TABLE XXII  
ANOVA: TWO-WAY ANALYSIS OF VARIANCE ON CALIFORNIA F SCALE SCORES FOR  
SEX AND CONTACT VARIABLES

Source	SS	df	MS	F	p
A: Sex	14.	1	14.	0.12	0.73
B: Contact	307.9	1	307.9	2.56	0.11
AB	29.6	1	29.6	0.25	0.62
Error	22014.8	183	120.3		

Homogeneity of variance  $\chi^2 = 0.20$

$p = 0.57$



significantly different and the "p" level in this instance was 0.73. The null hypothesis is not rejected for the sample in the study. No significant relationship was found between contact with Francophones and scores on the California F Scale. The finding that there was no significant interaction between sex and contact was therefore predictable.

#### Hypothesis 3a

There is no significant difference between the California F Scale scores obtained by non-Francophone students who have had high contact with Francophones and non-Francophone students who have had low contact with Francophones.

This hypothesis relates specifically to one of the main effects in the two-way analysis of variance. Table XVII, page 73, presents the means and variances obtained on the California F Scale for the high contact subjects, the low contact subjects, and the total group. The mean scores for high and low contact subjects are 63.6 and 66.2 respectively, while the mean score for the total group is 65.3.

Table XXII, page 86, indicates that the relationship between contact and California F Scale scores approaches but does not reach a level of significance of  $p = < 0.05$ . The null hypothesis cannot therefore be rejected.

#### Hypothesis 4

There is no significant difference between the French Attitude Scale scores obtained by non-Francophone students who have had high

contact with Francophones and non-Francophone students who have had low contact with Francophones when compared on the basis of current study of French and no interaction.

The means and variances for each of the three criterion measures for the low and high contact groups when compared on the basis of current study of French are presented in Table XVIII, page 74. Hypothesis 4 suggests that there will be no significant relationship between French Attitude Scale scores and the variables of current study of French and contact with Francophones. The mean scores for low and high contact subjects currently enrolled in French were 96.0 and 85.3 respectively. For those not enrolled in French the scores were 82.3 and 82.5.

The relevant data from the two-way analysis of variance are presented in Table XXIII. The difference between the mean French Attitude Scale scores of those currently enrolled in French and those who are not is significant at the  $<0.01$  level. This part of the null hypothesis is therefore rejected. Again, no significant relationship was found between contact and scores on the French Attitude Scale. No significant level of interaction was found between current study of French and contact.

The finding that subjects who are enrolled in French have a significantly more favorable attitude toward Francophones is not surprising. Students are not obliged to study French in high school in Alberta. Presumably, those who choose to study French might do so partly as a result of the absence of unfavorable attitudes toward Francophones.

TABLE XXIII

ANOVA: TWO-WAY ANALYSIS OF VARIANCE ON FRENCH ATTITUDE SCALE SCORES FOR  
STUDY OF FRENCH AND CONTACT VARIABLES

Source	SS	df	MS	F	p
A: Study of French	2312.	1	2312.	7.07	< 0.01
B: Contact	954.3	1	954.3	2.92	0.09
AB	1013.	1	1013.	3.1	0.08
Error	59846.	183	327.		

Homogeneity of variance  $\chi^2 = 0.35$

p = 0.33

Lambert (1963) and Feenstra (1967) found a significant relationship between achievement in French and favorable attitudes toward Francophones. Although the achievement level of French students in the sample was not determined, the fact that most of these students are enrolled in grade 11 French would seem to indicate that they were successful in French in the previous grade. If Lambert's theory is accepted it is not unusual that those students who continue with study of French manifest more favorable attitudes toward Francophones.

Although current study of French appears to be significantly related to favorable attitudes toward Francophones, no significant correlation was found between the number of years of French study and favorable attitudes toward Francophones. Expressed in terms of Pearson product-moment correlations, the correlation was found to be  $-0.06$ . This is not a significant relationship. One possible explanation is that study of French in elementary and junior high school may have been compulsory. As soon as the subjects had a choice they elected not to continue. It would also appear that, for the present sample, more study of French did not result in more favorable attitudes toward Francophones.

#### Ethnocentrism Scale Scores: Contact and Study of French

Although no specific hypothesis was formulated with respect to the relationship between contact scores and study of French using the Ethnocentrism Scale as a criterion measure, the findings will be presented.

The Ethnocentrism Scale means and variances for the low and high

contact groups when compared on the basis of current study of French are presented in Table XVIII, page 74. The mean scores for low and high contact subjects currently enrolled in French were 24 and 24.1. For those not enrolled in French the scores were 26.3 and 26.6.

Table XXIV presents the data from the two-way analysis of variance. The difference between the mean scores on the Ethnocentrism Scale for those subjects who are currently enrolled in French and those who are not is significant at the 0.02 level. However, no significant relationship was found between contact and scores on the Ethnocentrism Scale. No significant level of interaction was found between current study of French and contact.

#### California F Scale Scores: Contact and Study of French

No specific hypothesis was formulated with respect to the relationship between contact and current study of French using scores on the California F Scale as a criterion measure. The findings will however be reported.

The means and variances for the California F Scale for the low and high contact groups when compared on the basis of current study of French are presented in Table XVIII, page 74. The mean scores for low and high contact subjects currently enrolled in French were 63.4 and 58.9. The scores were 67.0 and 66.2 respectively for those not enrolled in French.

The relevant data from the two-way analysis of variance are presented in Table XXV. The difference between the mean scores on the California F Scale for those subjects who are currently enrolled in

TABLE XKV

ANOVA: TWO-WAY ANALYSIS OF VARIANCE ON CALIFORNIA F SCALE SCORES  
FOR STUDY OF FRENCH AND CONTACT VARIABLES

Source	SS	df	MS	F	p
A: Study of French	1006.1	1	1006.1	8.77	<0.01
B: Contact	237.1	1	237.1	2.07	0.15
AB	120.4	1	120.4	1.05	0.31
Error	20984.8	183	114.7		

Homogeneity of variance  $\chi^2 = 0.65$

p = 0.88

TABLE XXIV

ANOVA: TWO-WAY ANALYSIS OF VARIANCES ON ETHNOCENTRISM SCALE SCORES FOR STUDY  
OF FRENCH AND CONTACT VARIABLES

Source	SS	df	MS	F	p
A: Study of French	198.8	1	198.8	5.81	0.02
B: Contact	2.1	1	2.1	0.06	0.81
AB	0.1	1	0.1	0.004	0.95
Error	6265.4	183	34.2		

Homogeneity of variance  $\chi^2 = 0.68$

p = 0.88

French and those who are not is significant at the  $p < 0.01$  level. The relationship between contact and scores on the California F Scale was found not to be significant. There was no significant level of interaction between study of French and contact.

It should be noted that this was the only analysis of variance performed using the California F scale as the criterion measure on which a level of significant difference was attained. In this instance, there appears to be a positive correlation between high scores (unfavorable attitudes) on the Ethnocentrism Scale and the California F Scale, and not studying French. It is impossible to determine from the data whether not studying French is the result of attitudes as reflected by high scores on the two scales or whether the attitudes are a consequence of not studying French.

#### Two-Way Analysis of Variance: Sex and Study of French

A two-way analysis of variance using scores on the three scales as the criterion measures was performed on the variables sex and current study of French. No significant relationships were found.

#### GROUP COMPARISONS ON LANGUAGE SPOKEN

##### Hypothesis 5

There is no significant relationship between the French Attitude Scale score obtained and the language(s) spoken by the subject.

In order to test this hypothesis, two groups with distinctly different attitudes toward Francophones were required. Accordingly, all



204 subjects were ranked on the basis of the score obtained on the French Attitude Scale. The distribution of these scores is presented in Table XXVI. A decision was made to delete the 47 subjects with scores ranging from 76 to 85. This left a total of 59 subjects in the low attitude group with scores ranging from 35 to 75. The high attitude group consisted of 98 subjects with scores ranging from 86 to 125.

The subjects in both the high and low attitude groups were then divided into three subgroups: those who speak English only, those who speak English and Ukrainian, and those who speak English and another language other than Ukrainian. The frequencies for each of the three subgroups were determined and the chi square test was applied.

Table XXVII presents a contingency table showing the relationship between high and low French Attitude Scale scores obtained by subjects who speak English only and those who speak English and Ukrainian. The observed frequency of high attitude subjects who speak English only is higher than the expected frequency. For high attitude subjects who speak English and Ukrainian the observed frequency is lower than the expected frequency. Conversely, for low attitude subjects the observed frequency is lower than the expected frequency for subjects who speak English only, while it is higher than the expected frequency for those who speak English and Ukrainian. The difference is significant at the 0.04 level of confidence.

The relationship between high and low French Attitude Scale scores obtained by subjects who speak English only and those who speak English and another language (not Ukrainian) is presented in Table XXVIII.

TABLE XXVI  
DISTRIBUTION OF SUBJECTS BY FRENCH ATTITUDE SCALE SCORE

French Attitude Scale Score	Mid-point of interval	Frequency	Cumulative frequency
116-125	120.5	8	204
106-115	110.5	18	196
96-105	100.5	35	178
86- 95	90.5	37	143
76- 85	80.5	47	106
66- 75	70.5	28	59
56- 65	60.5	19	31
46- 55	50.5	4	12
36- 45	40.5	6	8
26- 35	30.5	2	2
		204	
Total			

TABLE XXVII  
 CHI SQUARE: CONTINGENCY TABLE FOR RELATIONSHIP BETWEEN  
 FRENCH ATTITUDE SCALE SCORES AND LANGUAGE(S)  
 SPOKEN BY SUBJECT (ENGLISH VS.  
 ENGLISH AND UKRAINIAN)

French Attitude Scale Scores		Language(s) Spoken By Subject	
		English Only	English and Ukrainian
High	Observed	83.	10.
	(Expected)	(78.7)	(14.3)
Low	Observed	38.	12.
	(Expected)	(42.3)	(7.7)
$\chi^2 = 4.4$		df = 1	p = 0.04

TABLE XXVIII  
 CHI SQUARE: CONTINGENCY TABLE FOR RELATIONSHIP BETWEEN  
 FRENCH ATTITUDE SCALE SCORES AND LANGUAGE(S)  
 SPOKEN BY SUBJECT (ENGLISH VS.  
 ENGLISH AND OTHER)

French Attitude Scale Scores		Language(s) Spoken by Subject	
		English Only	English and Other
High	Observed	83.	5.
	(Expected)	(78.9)	(9.1)
Low	Observed	38.	9.
	(Expected)	(42.1)	(4.9)
$\chi^2 = 6.0$		df = 1	p = 0.01

The observed frequency of high attitude subjects who speak English only is higher than the expected frequency, while for those who speak English and another language the observed frequency is lower than the expected frequency. For low attitude subjects, however, the observed frequency is lower than the expected frequency for subjects who speak English only. The observed frequency is higher than expected for those who speak English and another language. In this instance the difference is significant at the 0.01 level.

It would appear that the ability of the subject to speak a language other than English is directly related to more unfavorable attitudes toward Francophones for the sample in the study. In view of the fact that the levels of significance obtained were 0.04 and 0.01, the null hypothesis is rejected.

#### Hypothesis 6

There is no significant relationship between the French Attitude Scale score obtained and the language(s) spoken by the father of the subject.

Table XXIX presents the relationship between high and low French Attitude Scale scores obtained by subjects whose father speaks English only versus English and Ukrainian. The observed frequency of high attitude subjects whose father speaks English only is higher than the expected frequency. For high attitude subjects whose father speaks English and Ukrainian the observed frequency is lower than the expected frequency. Conversely, for low attitude subjects the observed frequency is lower than the expected frequency for subjects whose father

TABLE XXIX  
 CHI SQUARE: CONTINGENCY TABLE FOR RELATIONSHIP BETWEEN  
 FRENCH ATTITUDE SCALE SCORES AND LANGUAGE(S)  
 SPOKEN BY FATHER (ENGLISH VS.  
 ENGLISH AND UKRAINIAN)

French Attitude Scale Scores		Language(s) Spoken By Father	
		English only	English and Ukrainian
High	Observed	60.	17.
	(Expected)	(54.6)	(22.4)
Low	Observed	23.	17.
	(Expected)	(28.4)	(11.6)
$\chi^2 = 5.3$		df = 1	p = 0.02

TABLE XXX  
 CHI SQUARE: CONTINGENCY TABLE FOR RELATIONSHIP BETWEEN  
 FRENCH ATTITUDE SCALE SCORES AND LANGUAGE(S)  
 SPOKEN BY FATHER (ENGLISH VS.  
 ENGLISH AND OTHER)

French Attitude Scale Scores		Language(s) Spoken By Father	
		English Only	English and Other
High	Observed	60.	20.
	(Expected)	(54.9)	(25.1)
Low	Observed	23.	18.
	(Expected)	(28.1)	(12.9)
$\chi^2 = 4.5$		df = 1	p = 0.03

speaks English only. The observed frequency for subjects whose father speaks English and Ukrainian is higher than expected. The difference is significant at the 0.02 level of confidence.

The relationship between high and low French Attitude Scale scores obtained by subjects whose father speaks English only versus English and another language is presented in Table XXX. The observed frequency of high attitude subjects whose father speaks English only is higher than the expected frequency, while for those whose father speaks English and another language the observed frequency is lower than expected. However, for low attitude subjects whose father speaks English only the observed frequency is lower than the expected frequency. For low attitude subjects whose father speaks English and another language, the observed frequency is higher than expected. The difference is significant at the 0.03 level.

In view of the fact that the relationship between the French Attitude Scale score obtained and the language(s) spoken by the father of the subject was found to be significant in both tests, i.e. 0.02 and 0.03, the null hypothesis is rejected.

#### Hypothesis 7

There is no significant relationship between the French Attitude Scale score obtained and the language(s) spoken by the mother of the subject.

Table XXXI presents the relationship between high and low French Attitude Scale scores obtained by the subjects whose mother speaks English only versus English and Ukrainian. The observed



TABLE XXXI  
 CHI SQUARE: CONTINGENCY TABLE FOR RELATIONSHIP BETWEEN  
 FRENCH ATTITUDE SCALE SCORES AND LANGUAGE(S)  
 SPOKEN BY MOTHER (ENGLISH VS.  
 ENGLISH AND UKRAINIAN)

French Attitude Scale Scores		Language(s) Spoken By Mother	
		English Only	English and Ukrainian
High	Observed	64.	18.
	(Expected)	(57.3)	(24.7)
Low	Observed	24.	20.
	(Expected)	(30.7)	(13.3)

$$\chi^2 = 7.5$$

$$df = 1$$

$$p = 0.006$$

frequency of high attitude subjects whose mother speaks English only is higher than the expected frequency. For high attitude subjects whose mother speaks English and Ukrainian the observed frequency is lower than the expected frequency. Conversely, for low attitude subjects whose mother speaks English only the observed frequency is lower than expected, while for those whose mother speaks English and Ukrainian the observed frequency is higher than expected. The difference was found to be significant at the 0.006 level of confidence.

The relationship between high and low French Attitude Scale scores obtained by subjects whose mother speaks English only versus English and another language is presented in Table XXXII. The observed frequency of high attitude subjects whose mother speaks English only is higher than expected, while the observed frequency for those whose mother speaks English and another language is lower than expected. For low attitude subjects, however, the observed frequency is lower than the expected frequency for subjects whose mother speaks English only. The observed frequency for those whose mother speaks English and another language is higher than expected. The difference between observed and expected frequencies is significant at the 0.04 level.

The relationship between the French Attitude Scale score obtained and the language(s) spoken by the mother was found to be significant in both tests. The null hypothesis is therefore rejected.

In each instance where the relationship between the French Attitude Scale score and the language(s) spoken by the subject, the father of the subject and the mother of the subject was tested, a level of significance was found. Furthermore, in each instance it was found

TABLE XXXII  
 CHI SQUARE: CONTINGENCY TABLE FOR RELATIONSHIP BETWEEN  
 FRENCH ATTITUDE SCALE SCORES AND LANGUAGE(S)  
 SPOKEN BY MOTHER (ENGLISH VS.  
 ENGLISH AND OTHER)

French Attitude Scale Scores		Language(s) Spoken By Mother	
		English Only	English and Other
High	Observed	64.	15.
	(Expected)	(59.4)	(19.6)
Low	Observed	24.	14.
	(Expected)	(28.6)	(9.4)

$$\chi^2 = 4.4$$

$$df = 1$$

$$p = 0.04$$

## CHAPTER V

### SUMMARY, IMPLICATIONS AND FURTHER RESEARCH

#### SUMMARY

##### Procedure

The problem in the present study was to determine whether the degree of contact with Francophones was related to the attitudes toward this group held by non-Francophones. Also studied were the differences in attitude toward Francophones held by non-Francophones when compared on the basis of sex, language(s) spoken by the subject and his parents, and current enrolment in French.

The total grade 11 population in four rural centralized high schools located in three north-central Alberta towns comprised the study sample. The 204 subjects ranged in age from 15 to 18 years.

The French Attitude Scale, a 20-item measure designed to determine attitudes toward Francophones, was administered along with several selected items from the Ethnocentrism Scale and 14 selected items from the California F Scale. A total score was calculated for each subject on each of the scales. A high score on the French Attitude Scale presumably indicated a favorable attitude toward Francophones. A high score on the Ethnocentrism Scale presumably indicated a tendency to reject outgroups in general, while a high score on the California F Scale presumably indicated a tendency to authoritarianism and an antidemocratic ideology.

that more favorable attitudes were associated with subjects who speak English only, or whose father or mother speaks English only.

It might be speculated that the reason for the difference in attitudes resides in the fact that subjects who speak another language than English or whose parents speak another language than English are suspicious of and unfavorably disposed toward a competing minority ethnic group. It is possible that the special circumstances in Canada which resulted in official status for French may be resented by other linguistic groups and the resentment may be reflected in more unfavorable attitudes.

It should be recognized that the differences found with the present sample may not be found to be true of other samples. Ethnic attitudes may vary from community to community or from province to province. They may be dependent upon historical, political, economic, and other factors. The number and proportionate size of the ethnic groups in a community might be a factor. Finally, findings might differ considerably for an urban sample.

The difference in attitudes toward Francophones based on language(s) spoken by the subject and his parents may or may not be linked to contact with Francophones. The sample in the present study was not large enough to be divided into high and low contact subjects and then into high and low attitude subjects.

Extent of contact with Francophones was determined by means of multiple choice items. Sixteen different types of contact were included. In order to quantify the extent of contact with Francophones by each subject, a weighting of 1, 2 or 3 (low, medium or high) was assigned to both the contact quality and the contact frequency for each of the 16 contact variables. A total contact score was determined for each subject. Maximum totals for quality and frequency were 32 and 48 respectively. The maximum overall contact total was 80.

Two-way analyses of variance using scores from the three scales as criterion measures were carried out to determine significant differences between subgroups when compared on the basis of sex, contact and study of French. Pearson product-moment correlations between French Attitude Scale scores and the sixteen contact variables were computed. Finally, the chi square test for observed and expected frequencies was carried out to determine whether there was any significant relationship between high and low French Attitude Scale scores and the language(s) spoken by the subject, his father and his mother.

### Results

Low, medium and high contact subgroups were formed after examination of the distribution of the total contact score, Table XVI, page 72. There were 119 subjects in the low contact group, 17 in the medium contact group and 68 in the high contact group. The medium contact group was not considered in the analysis.

Using the French Attitude Scale as the criterion measure, it was found that there was no significant difference between the mean scores

obtained by the high and low contact groups. It should be noted that interaction for the high contact group was mainly between a minority group, Ukrainians, and Francophones.

In an attempt to determine whether there was a significant relationship between the French Attitude Scale scores and the extent of contact for each of the 16 contact variables, Pearson product-moment correlations were computed. Of the 16 contact variables, only four were found to have resulted in a significant correlation. A positive correlation was found between the French Attitude Scale scores and having a close Francophone friend, as well as staying over night in the home of Francophones. A negative correlation was found for the other two contact variables: length of residence in a Francophone community and acquaintance with high-status Francophones.

With respect to the Ethnocentrism Scale, no significant difference was found between scores obtained by the high and low contact groups. Similar results were found when the California F Scale was used as the criterion measure.

A significant sex difference was found for scores obtained on the French Attitude Scale. Females in the sample were found to be significantly more favorable to Francophones. A similar sex difference also occurred with respect to the Ethnocentrism Scale scores. Females in the sample scored significantly lower than males. No sex difference was found when the California F Scale was used as the criterion measure.

When the mean scores on the French Attitude Scale for subjects currently studying French and those not currently studying French were compared, a significant difference was found. Those currently studying

French obtained significantly more favorable scores. It could not be determined from the data whether favorable attitudes resulted from current study of French or whether subjects were currently studying French because they had favorable attitudes. No significant relationship was found, however, between number of years of French study and scores on the French Attitude Scale.

A significant difference was found using current study of French as the variable and the Ethnocentrism Scale scores as the criterion measure. Those currently enrolled in French were found to hold more favorable attitudes toward outgroups in general. Similar results were obtained for the same variable using the California F Scale scores as the criterion measure. Subjects currently studying French were found to be significantly less authoritarian and antidemocratic.

In order to study the relationship between French Attitude Scale scores and the language(s) spoken by the subject, the father of the subject and the mother of the subject, high attitude and low attitude subgroups were formed. This was done after examination of the distribution of the French Attitude Scale scores, Table XXVI, page 96. The high attitude group consisted of 98 subjects while the low attitude group consisted of 59 subjects. The 47 subjects comprising the medium attitude group were not included in the analysis.

A significant relationship was found between the French Attitude Scale scores obtained and the language(s) spoken by the subject, by the father of the subject and by the mother of the subject. Comparisons were made between three subgroups: those who speak English only, those who speak English and Ukrainian, and those who speak English and another



language other than Ukrainian. In each instance, more favorable attitudes were associated with subjects who speak English only, or whose parents speak English only.

### IMPLICATIONS

One of the reasons given for the need for the present study was to determine whether or not contact with Francophones might be a method whereby teachers of French as a second language could modify unfavorable attitudes toward Francophones to more favorable attitudes. The implications of the findings of the present study with respect to second language teaching will be presented in four sections dealing with contact and attitudes, sex and attitudes, study of French and attitudes, and language(s) spoken and attitudes.

#### Contact and Attitudes

For the sample of the present study, high contact consisting of high quality and high frequency contact did not appear to be related to more favorable attitudes toward Francophones. The reader is reminded, however, that 85% of the subjects in the high contact group in the present study were members of minority ethnic groups. It is possible that a study involving high contact between a majority and a minority group rather than between minority groups might yield different results.

An important implication for teachers of French is that it would appear that educational techniques such as tours, exchange programs, and discussions led by Francophone guest speakers or paraprofessional teaching assistants may be ineffective in producing more favorable

attitudes toward Francophones among members of minority ethnic groups. If contact as a result of residence in a Francophone community is not productive of favorable attitudes, it is questionable whether the minimal amount of contact provided by the school can result in favorable attitude change among minority group members.

A second implication for teachers of French as a second language is that having recognized the limited effectiveness of organized contact situations, they attempt to evaluate the effect of such contact on students who are members of a minority group.

A third implication is that teachers provide for discussion of intergroup contact and attitudes in an attempt to determine why greater contact does not appear to lead to more favorable attitudes.

Another implication is that teachers attempt to determine the effect of organized contact situations on students who are members of the majority ethnic group. It is possible that such students might react more favorably because their social status is more secure and less threatened by Francophones than is the case for members of another minority group.

As a result of the finding of the present study and previous studies that there is a positive correlation between close friendship and favorable attitudes, it would appear that exchange programs should be of long enough duration to permit the cultivation of close personal friendship. Such exchanges might profitably be preceded and followed by an organized program of pen or tape pals whereby participants would correspond via letter or tape. In this way friendships might be encouraged or solidified. If close friendship is a requisite for

favorable attitudes, it would seem particularly important that exchange program organizers attempt to pair exchangees on the basis of common interests.

In view of the fact that staying over night in the home of Francophones was positively correlated with favorable attitudes, it would seem to imply that educational tours or exchanges where participants are billeted together would be less productive of favorable attitude change than staying in the homes of Francophones.

Teachers of French as a second language in a Francophone community ought to be aware that those students who have resided the longest in the community are likely to hold more unfavorable attitudes toward Francophones. If the teacher finds that this appears to be true for his classes, he might confront the students with the finding and lead a frank discussion in an attempt to determine underlying causes.

Finally, it would seem that teachers may have to rely on educational techniques other than contact with Francophones in attempting to modify unfavorable attitudes to favorable ones. These techniques include teacher-led discussions, role playing, and the use of reading and audio-visual materials.

### Sex and Attitudes

The finding that girls were more favorably disposed to Francophones and to outgroups in general would suggest that teachers of French ought to determine whether such a difference exists in their own classes. If it does, teachers might concentrate on modifying the attitudes of their male students. This has direct implications for the

selection of reading materials, discussion topics and classroom activities. Scagliola (1971), in a study conducted with junior high school students of French in Alberta, found important differences between the expressed interests of boys and girls with respect to topics for inclusion in the French language curriculum. Boys were most interested in sports, automobiles, animals, and travel, while girls were most interested in fashions, social activities such as dating and dancing, and travel. Drama, music and art appealed slightly to females but much less so to males.

One of the implications for teachers of French is that they determine the interests of their students and attempt to obtain suitable books and audio-visual materials. A second implication is that teachers ask students to prepare a model, a display or a composition on a topic of the student's choice dealing with some aspect of the Francophone way of life. Finally, boys in particular should be encouraged to express their views in discussions about Francophones. In this way teachers may be able to ascertain the reason for the less favorable attitudes.

#### Study of French and Attitudes

Those currently enrolled in French were found to hold more favorable attitudes toward Francophones. However, it was also found that the number of years of French language study was not directly related to more favorable attitudes. The results of the study did not indicate whether those who presently studying French were still enrolled in it because they have always held more favorable attitudes, or

whether their favorable attitudes were a consequence of their study of French.

If the latter were found to be true teachers might derive considerable satisfaction from the finding. If, however, the former were found to be true it would imply that teachers of French as a second language might first of all determine which students hold unfavorable attitudes. This should be done in the first year of French study. Second, they might study and implement techniques for modifying unfavorable attitudes to favorable ones. Finally, they might evaluate the success of their efforts.

#### Language(s) Spoken and Attitudes

It was found, for the sample in the present study, that subjects who speak English only and whose father and mother speak English only held more favorable attitudes toward Francophones. This would seem to suggest that teachers of French as a second language ought to determine whether this is a factor in attitudes held by their students. If it is a factor, the teacher might attempt to ascertain underlying reasons for the difference. Of particular value might be discussions on the nature of ethnocentrism, the effect of membership in a minority ethnic group in Canada, the immigrant stigma attached to knowledge of a second language in Canada, and the status of English and French as official languages of Canada.

## FOR FURTHER RESEARCH

As a consequence of the findings of the present study it would appear that the following related topics might be particularly appropriate as the focus of further investigation:

1. Similar studies related to attitudes toward Francophones might be conducted in other rural communities of Alberta, in other provinces, and in urban communities in an attempt to determine whether the findings of the present study are applicable in other settings.
2. In view of the fact that only 15% of the high contact group in the present study was comprised of members of the majority ethnic group in Canada, the findings do not reveal the consequences of high contact between majority group members and Francophones. The need for a study focusing on the relationship between attitudes toward Francophones held by majority group members and contact with Francophones would seem to be indicated.
3. A similar study in which the focus of attention is a minority ethnic group other than Francophones might be conducted. The official status of the French language in Canada may have significantly influenced the effect of contact on attitudes for the present study. Research focusing on Ukrainians, Germans or Scandinavians might be conducted.
4. Having identified the difference in attitudes toward Francophones related to certain variables such as sex and languages spoken, it would seem desirable that further research be conducted in order to determine underlying causes. It would be useful, for example,

to know why males hold less favorable attitudes toward Francophones.

5. It would seem particularly desirable that a longitudinal study be undertaken to attempt to determine which is cause and which is effect in the relationship between favorable attitudes toward Francophones and the study of French.

6. Pedagogical techniques involving contact in the modification of attitudes toward Francophones ought to be examined carefully. It would seem desirable, for example, to evaluate the effect on attitudes as a result of contact through Francophone guest speakers and paraprofessional teaching assistants.

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## **APPENDICES**

## **APPENDIX A**

## APPENDIX A

### FOR YOUR INFORMATION

It is my expectation that the Social Attitude Survey, in which you will be participating, will contribute to the body of knowledge on social attitudes held by young people in Canada today. The information obtained will form the basis for a thesis which is part of the requirement leading to a Master of Education degree. It is very important, therefore, that you answer each question as honestly and as carefully as you can.

Since you will not be asked to write your name on your answer sheet, you can be assured that your answers will remain anonymous. Furthermore, your town or community will not be identified by name in the research report. This survey is not a test and will not be a factor in your mark in any school subject.

You should be able to complete the questionnaire in 30 to 35 minutes.

Please accept my thanks in advance for your co-operation in this project.

## SOCIAL ATTITUDE SURVEY

### General Directions

In order to complete the questionnaire you will require this question booklet, an answer sheet, and a pencil or a pen. All questions are to be answered on the answer sheet provided. If you wish to change an answer, make sure that you erase your first mark completely.

Do not put your name on the question booklet or the answer sheet as it is intended that all respondents remain anonymous. Please indicate your age, and whether you are male or female.

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### Section I

The statements in questions 1 to 41 are ones with which many people agree, and many people disagree. There are no right or wrong answers since many people have different opinions. Please indicate your agreement or disagreement with each statement by circling the letter from the following scale which best describes your feelings:

- A. I agree strongly.
- B. I agree generally.
- C. I agree slightly.
- D. I disagree slightly.
- E. I disagree generally.
- F. I disagree strongly.

#### EXAMPLE NUMBER ONE

Watching television is more enjoyable than reading a book.

(If you agreed slightly with this statement, you would circle C on your answer sheet. Look at EXAMPLE NUMBER ONE on your answer sheet and you will see that the letter C has been circled.)

Please answer items 1 to 41 in this way.

1. The French who have moved to this country have made a great contribution to the richness of our society.
2. The French-speaking people show great understanding in the way they adjust to the Canadian way of life.
3. Most people don't realize how much our lives are controlled by plots hatched in secret places.



4. The true Canadian way of life is disappearing so fast that force may be necessary to preserve it.
5. Canadian children whose first language is not French can learn much of value by associating with French-speaking playmates.
6. Canada may not be perfect, but the Canadian way has brought us about as close as human beings can get to a perfect society.
7. In general, Canadian industry tends to benefit from the employment of French-speaking people.
8. The French-speaking person has every reason to be proud of his race and his traditions.
9. People can be divided into two distinct classes: the weak and the strong.
10. By bringing the old French folkways to our society, French-speaking people have contributed greatly to our way of life.
11. In world organizations such as the United Nations, Canada must be sure that she loses none of her independence and complete power as a sovereign nation.
12. No weakness or difficulty can hold us back if we have enough will power.
13. If I had my way, I would rather live in a French-speaking region or country than in an English-speaking region or country.
14. It is wrong to try to force the French-speaking person to become completely English-Canadian in his habits.
15. French-speaking people set a good example for us by their family life.
16. The best guarantee of our national security is for Canada to get the secret of the nuclear bomb.
17. French-speaking people are very dependable.
18. French-speaking people are generous and hospitable to strangers.
19. It is only natural and right for each person to think that his family is better than any other.
20. French-speaking people are very democratic in their politics and philosophy.
21. French-speaking people have produced outstanding artists and writers.

22. Foreigners are all right in their place, but they carry it too far when they get too familiar with us.
23. A person who has bad manners, habits, and breeding can hardly expect to get along with different people.
24. The more I get to know French-speaking people, the more I want to be able to speak their language.
25. The worst danger to real Canadians during the last 50 years has come from foreign ideas and agitators.
26. If Canada lost its French-speaking people, it would indeed be tragic.
27. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.
28. French-speaking people's undying faith in their religious beliefs is a positive force in this modern world.
29. Nowadays when so many different kinds of people move around and mix together so much, a person has to protect himself especially carefully against catching an infection or disease from them.
30. Nowadays more and more people are prying into matters that should remain personal and private.
31. Sometimes I can't see much sense in putting so much time into education and learning.
32. Human nature being what it is, there will always be war and conflict.
33. Our town would be a much better town if more French-speaking people were to come here to live.
34. If people would talk less and work more, everybody would be better off.
35. Obedience and respect for authority are the most important virtues children should learn.
36. Certain people who refuse to salute the flag should be forced to conform to such a patriotic action, or else be imprisoned.
37. Canadians whose first language is not French should make a greater effort to meet more French-speaking people.
38. French-speaking people are more polite than many Canadians.
39. What this country needs most, more than laws and political programs, is a few courageous, tireless, devoted leaders in whom the people can put their faith.

40. What youth needs is strict discipline, rugged determination, and the will to work and fight for family and country.
41. We can learn better ways of cooking, serving food, and entertaining from French-speaking people.
- 

## Section II

Items 42 to 72 ask questions about you personally. Please answer each one as carefully as possible. Two examples are provided to show you how to mark your answer for these questions.

### EXAMPLE NUMBER TWO

How many brothers do you have?

- A. none
- B. 1
- C. 2
- D. 3
- E. more than 3

(If you had one brother you would circle B on your answer sheet. Look at EXAMPLE NUMBER TWO on your answer sheet and you will see that the letter B has been circled.)

### EXAMPLE NUMBER THREE

Do you watch television every day?

- A. yes
- B. no

(If your answer to this question was yes, you would circle A on the answer sheet. Look at EXAMPLE NUMBER THREE on your answer sheet and you will see that the letter A has been circled.)

42. Which language(s) does your father understand? (Mark more than one if applicable.)

- A. Cree
- B. English
- C. French
- D. German
- E. Ukrainian
- F. Other

43. Which language(s) does your father speak? (Mark more than one if applicable.)

- A. Cree
- B. English
- C. French
- D. German
- E. Ukrainian
- F. other

44. Which language did your father learn first as a child?
- A. Cree  
B. English  
C. French  
D. German  
E. Ukrainian  
F. other
45. Which language(s) does your mother understand? (Mark more than one if applicable.)
- A. Cree  
B. English  
C. French  
D. German  
E. Ukrainian  
F. other
46. Which language(s) does your mother speak? (Mark more than one if applicable.)
- A. Cree  
B. English  
C. French  
D. German  
E. Ukrainian  
F. other
47. Which language did your mother learn first as a child?
- A. Cree  
B. English  
C. French  
D. German  
E. Ukrainian  
F. other
48. Which language(s) do you understand? (Mark more than one if applicable).
- A. Cree  
B. English  
C. French  
D. German  
E. Ukrainian  
F. other
49. Which language(s) do you speak? (Mark more than one if applicable).
- A. Cree  
B. English  
C. French  
D. German  
E. Ukrainian  
F. other
50. Which language did you learn first as a child?
- A. Cree  
B. English  
C. French  
D. German  
E. Ukrainian  
F. other

51. How long have you lived in this town or community?
- A. less than 1 year
  - B. 1 to 2 years
  - C. 3 to 5 years
  - D. 6 to 10 years
  - E. more than 10 years
52. If you have lived elsewhere, indicate where. (Mark more than one if applicable.)
- A. another community in Alberta
  - B. B.C., Saskatchewan, or Manitoba
  - C. Ontario or the Maritimes
  - D. Quebec
  - E. U.S.A.
  - F. other
53. Are you presently studying the French language in school?
- A. yes
  - B. no
54. How long have you studied the French language in school? (Consider the present school year as already completed.)
- A. never
  - B. 1 or 2 years
  - C. 3 or 4 years
  - D. 5 or 6 years
  - E. more than 6 years

NOTE: The expression first language in the following items means either: (1) the language which the person learned first as a child, or (2) the language which is spoken most frequently in that person's home.

55. How many people do you know personally whose first language is French? (That is, you know them at least well enough to speak to.)
- A. none
  - B. 1 to 3
  - C. 4 or 5
  - D. 6 to 10
  - E. more than 10
56. How many families do you know personally whose first language is French? (A family would consist of a father, a mother, and at least one child.)
- A. none
  - B. 1
  - C. 2
  - D. 3
  - E. 4 or more
57. During the last three years, how many very close friends have you had whose first language is French? (A very close friend would be someone with whom you can discuss confidential matters.)
- A. none
  - B. 1
  - C. 2
  - D. more than 2

58. How many different teams, clubs, or groups have you belonged to in your life? (e.g., hockey team, 4H club, or church group) (Note: one hockey team each year for 7 years would count as 7 teams.)
59. How many different teams, clubs, or groups have you belonged to which included people whose first language is French?
60. How many teachers have you had whose first language is French?
61. During the last three years, how often have you visited the home of people whose first language is French?
62. How long have you attended classes in which there were students whose first language is French? (Consider the present school year as already completed.)
63. During the last three years, how many guest speakers have you had in your class at school?
64. During the last three years, how many guest speakers whose first language is French have you had in your class at school?
- A. none  
B. 1  
C. 2 to 5  
D. 6 to 10  
E. more than 10
- A. none  
B. 1  
C. 2 to 5  
D. 6 to 10  
E. more than 10
- A. none  
B. 1  
C. 2 to 5  
D. 6 to 10  
E. more than 10
- A. never  
B. rarely (one or twice in three years)  
C. occasionally (approximately twice a year)  
D. frequently (approximately once a month)  
E. very frequently (approximately once a week)
- A. never  
B. 1 to 3 years  
C. 4 to 5 years  
D. 6 to 10 years  
E. more than 10 years
- A. none  
B. 1  
C. 2 or 3  
D. more than 3
- A. none  
B. 1  
C. 2  
D. more than 2

65. How long have you had neighbors whose first language is French? (Consider the present school year as already completed.)
- A. never  
B. 1 to 3 years  
C. 4 to 5 years  
D. 6 to 10 years  
E. more than 10 years
66. How many doctors, dentists, lawyers, university professors, engineers, or accountants do you know personally?
- A. none  
B. 1  
C. 2 to 5  
D. 6 to 10  
E. more than 10
67. How many doctors, dentists, lawyers, university professors, engineers, or accountants whose first language is French do you know personally?
- A. none  
B. 1  
C. 2 to 5  
D. 6 to 10  
E. more than 10
68. Since you started school in grade one, how many times has your school class visited another school, or a business?
- A. never  
B. once or twice  
C. 3 to 5 times  
D. more than 5 times
69. Since you started school in grade one, how many times has your class visited another school or a business where French is the main language of communication?
- A. never  
B. once or twice  
C. 3 to 5 times  
D. more than 5 times
70. How many times in your life have you stayed over night in the home of people whose first language is French?
- A. never  
B. once or twice  
C. 3 to 5 times  
D. 6 to 10 times  
E. more than 10 times
71. During the last three years, what portion of your free time (leisure time) do you estimate that you have spent with people whose first language is French?
- A. none  
B. up to one-third of the time  
C. up to one-half of the time  
D. more than one-half of the time
72. How much time have you spent visiting an area of Canada (e.g., Falher, Quebec City), or another country (e.g., France) where French is the main language of communication?
- A. none  
B. up to 2 weeks  
C. 3 to 4 weeks  
D. 5 to 8 weeks

Please answer the following on the back of your answer sheet.

Other than your immediate family, what in your opinion has been the most important factor in determining your attitude toward French-speaking people?

Thank you very much for completing this questionnaire. Please return it to your teacher.



## APPENDIX B

## APPENDIX B

### FRENCH ATTITUDE SCALE

1. The French who have moved to this country have made a great contribution to the richness of our society.
2. The more I get to know French-speaking people, the more I want to be able to speak their language.
3. French-speaking people are very democratic in their politics and philosophy.
4. French-speaking people have produced outstanding artists and writers.
5. By bringing the old French folkways to our society, they have contributed greatly to our way of life.
6. French-speaking people's undying faith in their religious beliefs is a positive force in this modern world.
7. The French-speaking person has every reason to be proud of his race and his traditions.
8. If Canada should lose the influence of French-speaking people, it would indeed be a deep loss.
9. French-speaking peoples are much more polite than many Canadians.
10. We can learn better ways of cooking, serving food, and entertaining from the French-speaking people.
11. French-speaking people are very dependable.
12. Canadian children can learn much of value by associating with French-speaking playmates.
13. French-speaking people set a good example for us by their family life.
14. French-speaking people are generous and hospitable to strangers.
15. Canadians should make a greater effort to meet more French-speaking people.
16. It is wrong to try to force the French-speaking person to become completely Canadian in his habits.
17. If I had my way, I would rather live in France than in this country.

18. London would be a much better city if more French-speaking people would move here.
19. The French-speaking people show great understanding in the way they adjust to the Canadian way of life.
20. In general, Canadian industry tends to benefit from the employment of French-speaking people.

## APPENDIX C

## APPENDIX C

### ETHNOCENTRISM SCALE

1. The worst danger to real Canadians during the last 50 years has come from foreign ideas and agitators.
2. Now that a new world organization is set up, Canada must be sure that she loses none of her independence and complete power as a sovereign nation.
3. Certain people who refuse to salute the flag should be forced to conform to such a patriotic action, or else be imprisoned.
4. Foreigners are all right in their place, but they carry it too far when they get too familiar with us.
5. Canada may not be perfect, but the Canadian way has brought us about as close as human beings can get to a perfect society.
6. It is only natural and right for each person to think that his family is better than any other.
7. The best guarantee of our national security is for Canada to get the secret of the nuclear bomb.

**APPENDIX D**

## APPENDIX D

### CALIFORNIA F SCALE

1. Obedience and respect for authority are the most important virtues children should learn.
2. What youth needs is strict discipline, rugged determination, and the will to work and fight for family and country.
3. Nowadays when so many different kinds of people move around and mix together so much, a person has to protect himself especially carefully against catching an infection or disease from them.
4. What this country needs most, more than laws and political programs, is a few courageous, tireless, devoted leaders in whom the people can put their faith.
5. No weakness or difficulty can hold us back if we have enough will power.
6. Human nature being what it is, there will always be war and conflict.
7. A person who has bad manners, habits, and breeding can hardly expect to get along with different people.
8. People can be divided into two distinct classes: the weak and the strong.
9. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.
10. The true Canadian way of life is disappearing so fast that force may be necessary to preserve it.
11. Nowadays more and more people are prying into matters that should remain personal and private.
12. If people would talk less and work more, everybody would be better off.
13. Sometimes I can't see much sense in putting so much time into education and learning.
14. Most people don't realize how much our lives are controlled by plots hatched in secret places.

# APPENDIX E

## RAW DATA

### PERSONAL DATA

Key: 1 = Male  
2 = Female

1 = Currently enrolled in French  
2 = Not currently enrolled in French

#### Languages spoken

1 = Other only  
16 = English only  
17 = English and other  
18 = English and Ukrainian  
19 = English, Ukrainian and other  
20 = English and German  
21 = English, German and other  
24 = English and French  
25 = English, French and other  
26 = English, French and Ukrainian  
28 = English, French and German  
48 = English and Cree  
50 = English, Cree and Ukrainian

I.D.	Sex	School	Age	Enrollment in French	Subject's Language	Father's Language	Mother's Language
1	1	A	16	2	16	20	16
2	1	A	18	2	16	16	16
3	2	A	17	2	16	20	28
4	1	A	17	2	16	16	25
5	1	A	16	2	16	16	26
6	2	A	17	2	16	16	24
7	2	A	16	2	16	18	18
8	1	A	17	2	16	20	16
9	1	A	17	2	20	20	20
10	2	A	16	1	16	16	16
11	1	A	16	2	16	20	16
12	1	C	16	2	16	16	16
13	2	C	16	1	16	16	16
14	2	C	16	2	16	16	20
15	2	C	16	1	16	16	16
16	2	C	17	1	16	17	16
17	2	C	17	2	16	16	16
18	2	C	16	2	16	16	16
19	1	C	17	2	16	18	18
20	1	C	18	2	18	18	18
21	1	C	16	2	16	24	16
22	2	C	16	2	16	17	16
23	1	C	17	2	16	18	18



I.D.	Sex	School	Age	Enrollment in French	Subject's Language	Father's Language	Mother's Language
24	2	C	17	2	16	18	18
25	1	C	16	2	16	16	16
26	2	C	16	2	16	16	16
27	1	C	17	2	16	20	16
28	1	C	16	2	18	18	18
29	1	C	17	2	16	16	16
30	1	C	16	2	16	24	16
31	1	C	16	2	16	16	16
32	2	C	17	2	16	17	16
33	2	C	16	1	16	16	16
34	2	C	16	2	16	16	20
35	2	C	16	2	16	16	16
36	2	C	17	1	16	16	16
37	2	C	17	1	16	16	16
38	1	C	17	2	16	19	16
39	2	C	16	1	17	17	16
40	2	C	16	1	16	16	16
41	1	C	17	2	16	16	16
42	2	C	16	2	16	16	16
43	2	C	17	2	16	16	16
44	2	C	16	2	16	16	17
45	2	C	17	2	16	16	16
46	1	C	17	1	16	18	17
47	1	C	16	1	16	16	16
48	1	C	16	2	19	16	19
49	1	C	16	2	16	19	16
50	1	C	16	1	16	16	17
51	1	C	16	2	16	16	16
52	1	C	16	2	16	19	18
53	1	C	16	2	16	18	18
54	2	C	16	2	16	16	18
55	1	C	16	2	16	16	16
56	1	C	16	2	16	16	16
57	1	C	16	2	16	16	16
58	1	C	18	2	16	16	16
59	1	C	16	2	16	16	18
60	1	C	16	2	16	16	16
61	1	C	16	2	16	16	16
62	2	C	16	1	16	16	16
63	2	C	16	2	16	16	16
64	2	C	16	2	16	16	16
65	1	C	17	2	16	16	16
66	2	C	16	2	16	16	16
67	2	C	16	2	16	16	16
68	1	C	18	2	16	16	16
69	1	C	16	2	16	16	16
70	2	C	16	2	16	17	16

I.D.	Sex	School	Age	Enrollment in French	Subject's Language	Father's Language	Mother's Language
71	2	C	16	2	16	16	16
72	2	C	17	2	16	16	16
73	1	C	17	2	16	16	16
74	1	C	17	2	16	16	16
75	2	C	16	2	18	18	18
76	2	C	17	2	16	16	16
77	2	C	16	1	16	16	21
78	1	C	17	2	16	16	16
79	2	C	18	2	16	16	16
80	1	C	17	1	16	16	16
81	1	C	16	2	16	16	18
82	2	C	18	2	16	17	16
83	2	C	17	2	16	16	16
84	1	C	17	2	16	16	16
85	2	C	16	2	16	16	16
86	2	C	16	1	16	17	18
87	2	C	17	2	16	18	18
88	2	C	16	1	16	16	19
89	1	C	16	2	16	16	16
90	2	C	16	2	16	16	16
91	1	C	18	2	16	16	16
92	2	C	16	1	16	16	16
93	1	C	17	1	16	16	16
94	2	C	17	2	16	16	16
95	1	C	16	2	16	16	16
96	1	C	17	2	16	17	16
97	2	C	16	2	16	16	16
98	1	C	18	2	16	16	16
99	1	C	16	2	16	16	18
100	2	C	16	2	16	16	16
101	1	C	17	2	16	16	16
102	2	C	16	2	16	16	16
103	2	C	16	2	18	18	18
104	2	C	16	2	18	23	19
105	2	C	16	2	17	1	1
106	1	D	16	2	16	18	18
107	1	D	17	2	18	18	16
108	1	D	16	1	16	16	16
109	1	D	18	2	18	18	18
110	1	D	17	2	16	17	16
111	2	D	16	2	17	17	17
112	2	D	16	1	16	20	20
113	2	D	16	1	16	17	18
114	2	D	17	2	16	16	16
115	2	D	16	1	20	20	20
116	2	D	17	2	16	16	16
117	2	D	17	1	16	16	16

I.D.	Sex	School	Age	Enrollment in French	Subject's Language	Father's Language	Mother's Language
118	2	D	16	1	16	16	16
119	2	D	17	1	18	18	18
120	1	D	16	1	16	17	16
121	1	D	16	2	16	16	16
122	2	B	17	1	16	18	20
123	2	B	17	1	16	16	18
124	1	B	16	1	18	18	18
125	1	B	16	1	16	18	18
126	2	B	17	2	18	18	18
127	2	B	16	1	16	18	22
128	2	B	16	1	18	18	18
129	2	B	16	2	18	19	18
130	1	B	16	2	18	18	18
131	1	B	16	2	18	18	18
132	2	B	16	1	18	18	18
133	2	B	17	1	16	18	16
134	2	B	15	1	18	19	16
135	2	B	16	1	16	16	18
136	1	B	17	2	16	18	18
137	1	B	17	2	16	18	18
138	1	B	18	2	16	18	16
139	2	B	17	2	16	19	18
140	1	B	16	1	18	23	18
141	1	B	16	2	17	19	18
142	1	B	16	1	16	18	18
143	1	B	16	2	16	26	18
144	1	B	16	2	18	18	18
145	1	B	16	2	16	18	18
146	1	B	16	1	16	18	17
147	1	B	16	2	16	18	18
148	1	B	16	2	18	18	18
149	1	B	17	2	18	18	16
150	2	B	17	2	16	18	16
151	1	B	18	2	18	18	18
152	2	B	16	2	16	18	18
153	1	B	17	1	18	18	18
154	2	B	16	1	18	18	18
155	1	B	17	2	16	18	--
156	1	B	16	2	16	16	50
157	2	B	16	2	18	18	18
158	1	B	17	2	16	18	16
159	1	B	17	2	16	18	16
160	2	B	16	1	16	18	19
161	1	B	17	2	18	18	18
162	1	B	16	2	16	18	18
163	1	B	16	2	16	19	18

I.D.	Sex	School	Age	Enrollment in French	Subject's Language	Father's Language	Mother's Language
164	1	B	17	1	16	18	18
165	1	B	17	1	18	18	18
166	2	B	15	1	18	26	18
167	1	B	16	2	16	16	18
168	1	B	16	2	16	19	18
169	1	B	16	2	16	--	18
170	2	B	16	1	18	18	18
171	1	B	17	2	16	18	28
172	1	B	16	2	18	18	18
173	2	B	16	2	48	48	48
174	1	B	17	2	48	48	48
175	2	B	17	2	48	48	48
176	2	B	17	2	48	50	48
177	2	B	16	2	48	48	48
178	1	B	16	2	16	48	16
179	2	B	17	2	48	48	48
180	2	B	17	2	48	48	48
181	2	B	18	2	48	48	48
182	2	B	16	1	16	16	16
183	2	B	16	1	16	20	16
184	2	B	16	2	16	16	16
185	2	B	16	1	16	16	16
186	2	B	16	1	16	16	17
187	2	B	16	2	16	16	16
188	1	B	15	2	16	16	16
189	1	B	17	2	16	16	16
190	2	B	15	2	16	16	20
191	1	B	16	2	16	16	16
192	1	B	15	2	16	20	17
193	1	B	17	1	16	16	17
194	2	B	16	2	16	16	16
195	1	B	17	1	17	17	17
196	1	B	17	2	16	16	16
197	2	B	17	2	16	17	16
198	2	B	17	2	16	16	16
199	2	B	17	2	16	16	16
200	1	B	16	2	16	16	16
201	2	B	16	1	16	16	16
202	2	B	17	2	16	16	16
203	2	B	17	2	16	16	16
204	1	B	18	2	16	16	16

## FRENCH ATTITUDE SCALE

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1	B C B C A B F A D B B A A F B C D C A A
2	B F C F A C D F F F D D A F D C F F F C
3	C D B D A C F D C D D F B D C C D D D D
4	C B A C D D F A D E D C B A B C D D D C
5	C E B B B E A D F B E E B C D E F D E E
6	D C C C A D F B D E C B A C C D A C E C
7	C B B F A F E A F B B A B A E C F D E F
8	B D C C B C D C C C B C B C B C D B C C
9	C D B C C E F B F B B D B D C D F C F F
10	C D B D A E E A D E E E E A D D E C E E
11	B C A B A C F A C C E D A B B B D B E C
12	F F A D A F F A F F F F F A A A F A F F
13	B C B C A C F A F B B B B C B E C C F C
14	F F A F B F F A F B B B C D F F F F D F
15	B B A B A B E B C B B C B B C C C B D C
16	C C A B A C D A E B B B B B C E C C E B
17	D C B C B C F C C B B B B C D C C B C E
18	E E B C A B B A B B B D C A E F C A E B
19	F C F E A D F D C D C C C C E D F C E C
20	E C D E F D F C E B B C B C C C D C F F
21	C F C F A C F F D D D B A E E C E F E A
22	C B E C A D F C E C C D C E D C E E E C
23	A B A F A C F B C B A B A D F B C F D B
24	D D B E B D E A D B D C D D E D D C D C
25	E C B E B D D F F C C F D E D A E B A D
26	C D B C A B F A C C B C B C C C D C A B
27	C F D D D C F D D D C D E E C D D D D D
28	B C B C C B E C C C C C B B E B C B E C
29	F E C D C D F B D C D C E B E C F F F F
30	C D C F A E F E D D C A B E D C D B D C
31	E B B B C D C B B B D C A F F C F F F C
32	C C B E A E D A D F F F C F A A A B F C
33	A B A E A A A A D E D D B A A B B C C D
34	C E C C A E E E E C C E B A F E C A E E
35	C C B C A C E B C C B B C D D C C D D D
36	C E E F A F F A E C B B E B C B E E E E
37	D C B D A C D A C C C C B B D C D A D C
38	B B A B A B F B B B B B B A E B B B C D
39	A C A B A A C A C B B C A A A B C A E C
40	C C A F A C A F C B B B C A E A C B D C
41	E C D E A B E A D B D B A B A C B E E D
42	C E A F A D F E F B D E C F D D E E F D
43	C C C D A C E C C B B C C A D C D C F D
44	B B B C A B E A C C C B B A A D B B D C
45	C D B E B E F F D B B B B E C D D C C C
46	F F B E A E F E C B D F B E F D F E E E
47	C E C C B D F D C C D D B C C B E E E C

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48	F E D C A D F A F E D F E A E A C B D B
49	C D E E A D F D C F B B A F D C D C E B
50	B D F B A B F F D B D C A B B B C D C F
51	B F B E A B F A D C B D A D B F E B E E
52	E C C E A C F A C B B C B E D D C D D D
53	B D B C A E F E D D D B B D C C D C C C
54	B D C D B B D A D B B D B B C D C C D C
55	C D A F C E F A C D B D A B F C F B A C
56	D F B D A D E A B E D F B D A C D C D C
57	B F C C A C F E C B B B B E C C E C E C
58	A E B B A A F E A C C C A C A B C B D B
59	E E C D B D F B D D C C B E B B D B D B
60	F E C D E E C A E E B D C B D C C C C C
61	D F F E F F F E F D C F C E D C F E F E
62	C F A D A B E E E B B C B A B B C B D E
63	C C B D B E F A C B B C C F D F E C D D
64	C C D D A C F C C C C C C D C C D E F C
65	C F B B A C E B D C B A B C E B D D B C
66	B C A E A C E A C C B B C A B A C A C C
67	B A B B A A F A B C B B A C B B C C C B
68	C C B C C B E E D E A C B D C C D C D C
69	F F F F A F F A F F F F C F F F F F F F
70	B B B C A C F E D D B E B A C E A B B A
71	C B C C A B F A C C C C B C A D E C F C
72	D D B D B E F A E F A D D F F D F F F F
73	B C E D F E E B D C B C C B C D D C D D
74	D F A D A B C A D E C E B C E C A B E D
75	C F A F B C F A C C C D C C D D E C E F
76	C F B B A E D A E E E C C B C F D D E E
77	D D A E A D D A D D E A B B E A E C E D
78	D B F E A F F E F E C B B F E D D D D D
79	F C C D B F F B E C C C D C D B E D E C
80	B C A C A A E A C B B C A B C B C B D D
81	A C C C A A D B C A A B A B A B B B C B
82	C B A B A C F F C E B F A D C D C C D B
83	A A A F A A B A B A B A B A A E A A A A
84	C E C B F E B D E C C B B C C C D C C C
85	C B C D B B F E F C C F E B F C E F E E
86	A E A A A B F A D D C C B A A C D B E B
87	D C A C A E E A C D B C B E A B B A D D
88	B E A D A B C A C B A B A A A B C A D C
89	B B C B A B E C C B B B B B C D C B C C
90	C B B A D A A A A C C D A A B C C B B B
91	C F B D A E F C D D B C B F C C F C D C
92	A B A B A B D A B B B B A A A A B A C C
93	C F A F C D F A E E B B A A C D C B F F
94	B A B C A D F D C A B B A C C B F B C B
95	C E A D A C F C C B B D A D D E F D D A
96	C E E E A C F D D D B C B E C C D C E D
97	C C B B B C E A C B B C B C C B D C E D

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98	F F F F F F F F F F F F C F F A F F F B
99	F E F F A F F F F E D F C F F F F E F F
100	D C A C A B F B A B C C B B B B C B C B
101	F F D C B F F F F F F C B F F F F F C F
102	C C A D A C F D B B C D C D C A E B C E
103	C F F F E D F B F F E E C F F F F F F
104	C F B F F F F B C C C E F F D F F F C
105	F C B C A E C F E C E F E F A E E C E F
106	D C E E A D D A C C D D D E D C D D D C
107	F F A E B C F A C C C C B A F A E D D D
108	A D A C A B E A C D C D A B A C C B F D
109	B D A B A A E A C C B C A D A C C B E B
110	B D C C A C F C C F C C B F A A C E F C
111	B D F D A B E A D C C B B C B B D D F C
112	C C C F A C F A F E E E B E B F D C E C
113	B D B D A B C E D D D F D B D C C D D D
114	A C A A A D F A D C C D B E A E E C F E
115	A D A E A D B A B B B B D A A A B A B A
116	B B A D A E F A A B B C A B B D C B C C
117	B D B E A B E B C C C D B A D D D C D C
118	B B A F A C F A B C B B B A A A C B C C
119	A A B A A B C A B C A C A A B A C A F B
120	B D C D A A D A C B C D A F A C D D D D
121	B B E E A E F F E E B B B C A A D B D B
122	B B B C A C C A C B B C C D E F E E E E
123	B D A E B E F B F E E D E E C E F E F F
124	D F F F A A F A F C F F A A F C F D F B
125	B D A D A F F D C A C D A A D D D C C C
126	B D A F C F F B D B B E C F C E F F F F
127	A C A D A B F A C F D D E B E E F C E F
128	B B C B F E F B C B B F B F A E F B F F
129	C B C B A C F A F C F C C E C F F F F F
130	C F F A B C F A D C F F B C F A F E F B
131	B B A C F C F B C C E C B B D C E E F F
132	B B D D A B E A C B B C C A B C C B B C
133	B B C C A B E B B B B D B A B B B B D D
134	B B A D A E C D E D B B D A C C C B B D
135	A D C D A B F B D C C D A A B F D C E D
136	B D C E C D F F E F D E D E D E D F F
137	F D C F B F F F C F A B F F D D F F F D
138	D D D E B E A B A B A B C F F B F F F F
139	C D D D B C F B D D F C C D D B E C D B
140	B C D C B D F C C C B B B B C C E B E B
141	F F A C C D D F C F F F F F F F F F F
142	C C C E A C E B D D D C B C D D F C F F
143	C F D B A C F B F D C D C F C E F C F D
144	C F B F A F F C E B F A B E F C F C F F
145	B B F D B D F E C D E C A F C C C C E A
146	C D B C A C F A D C C D B F E B E F E C
147	C B B E A B E B C C B B C A D C B E F F

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148	B C B B A B D A C C C E B B B B D C D D
149	D D B A A B F C D B B A A B A C F B B B
150	A B B B A A D A C E B C B A A C D D E D
151	F F C F D F F B F F F B C F F F F F C F
152	B B E F A C F B C D C B B C F C F D F E
153	D C A F A D D D C E E C C C E D D C C C
154	C D C F A F D B C B B D C A B B E D E E
155	B B A D A C C A C C D C B A A C C A D B
156	B C A A A C F A B C C B A B E A F B F E
157	B B C F A C F E D C B D B C D B E D C C
158	D C C B B D D C B D E D D B D C F C D D
159	B B A E A B C A D F B C A A A B D B E E
160	D E B E A E F C F D E D C D C F E D E F
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162	C B C C B D F C D B B C B D C C D C C E
163	B F B E A B E D E C C F B C A D D F E D
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167	B C B D A C F D E D B E B C C C F C E E
168	C D F F D E F B C B B D B E B D E E F E
169	C B B C A C D C C A D B B E B C C C D C
170	C A A D F F F F F E E F A F F A F F F F
171	D D C F D D C B C C C C B F C C F D E F
172	B D C D A B F F F D F F A C B B E C F D
173	E B B B A D F E C B F A A B E C F C F A
174	D B E B A E F A E B D A B F D B E D E F
175	A A A B A B F A B C C C A B C A D D F D
176	C E C D C B F C D D F C C D E A E C F F
177	D B B D C E A B F B F B F C E D F E F F
178	C C C C C B C B C D C E B B B C D C C C
179	F E C C A E F D D D D F C F C D F F F F
180	D E C E A B F C F E F A B F C D F F F F
181	F F F A A B F D B F F C B F E D F D F D
182	B D A B A C E C D D C B A A B D E F F F
183	C D B C B E F E E E E E D F A F C E F
184	B E B C A D F A E E C D D B F A F F E F
185	B C B C B B B E D D C D B A B B D B D E
186	B D C D A E F A C B E F B D C F D D F F
187	C C B C A C F A D B C D B E C C E E E C
188	B B A C A D D C C C A E B C B B D C C B
189	B A A C C B F C C C C D B B A B F B C E
190	C B B C A C F A C D C B B E D B E D E D
191	B D C A A C E E D C D D C C B D D D D C
192	C B A F B A F A C C E C F B C B E B D B
193	B D D B A B D B C D D C B B B D D E F F
194	C C C D B C C D E C B B D C C D D B C D
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196	B E B C A C B B C D D D B B C C C B D C
197	C D B C B D D C C B C C C A D C D D D C



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198	B B A C A B F D C B B B B A C B C C D D
199	A B C B A B F A F B B C B C A F D C D C
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201	B C B A A B F A E B B D B A A B E B E E
202	B B B C A B D A B A A B A A A C C D C
203	C C A B A C F B E D C B B C D B F F F E
204	C C B B A C D A D B C D C B C C C B C C

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## ETHNOCENTRISM SCALE

## CALIFORNIA F SCALE

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1	D A F F D E D
2	C A F D F C F
3	C B F C D D F
4	C A E C C B E
5	E A E B E A F
6	A B C A C B A
7	C A F F E E F
8	D B D D E B E
9	F A F F E F E
10	D B E E E E E
11	F A F E D A B
12	A A F F F A F
13	F A F C E B F
14	B A F B F F F
15	C B F D D E E
16	F A D B F E C
17	D A F E E B F
18	D D F B E B F
19	B A F F E F F
20	B A F A E B A
21	D A F A A A F
22	F A F C B B E
23	A B F A F F A
24	B B A A F C E
25	C C F E C B D
26	A A F B F C D
27	B D C C F D E
28	B A D C E D B
29	B A B C E A F
30	B B F B F C E
31	C C D B D A F
32	F F F F F B F
33	D B C F F F F
34	D A B D D B E
35	B B E B C C F
36	F B F F F B F
37	C A C D F E C
38	F A F A C D A

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A C C B D A A A F A A A F A
C C C A C D F C F A D D F F
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B C A A C A B A A C A B A B
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C D D C B C E D B B D D C E
B E E B B E C D F B E D B C
B D F B B A E D F D D C F E
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F D F A F F F F A A F A F A
A D B A A B D D E B B B C B
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D E E B C F C C E B C B D C
A B E E B B E F F B B A D D
B A D B A A F A B A B E E F
B F F A B B E A B B B B A C
F E F A F C F C C C C C E D
D E F D C A C A B C B A C B
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D B E B C B D B C B B B D
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C C B A B A E B B D B B D B
A A D A C F B B D C F C A E
A D F D F C F A A B D D A B
F C C C F D D C B C A E A E
B D C A E B B A B B B A B B
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C C C F C F E A A B B B B E
B A F B F A A F A A F A F F
C F F B F B C E F A E B C E
E C E B B C E A E A A A A A
B C C E E B B C B B D C B C
A F F F B F E C F A E C B F
B B F A B D E A D B A A C A
A A A A A A E C B A A B E D

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39 E B F D E F F  
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 41 E A E F E A F  
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 43 C B A C D C E  
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 45 C B E B F C F  
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 91 C A F E A B B  
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 183 B A D B F D E  
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 185 D C F C E E D  
 186 F A E C B C F  
 187 E B E A E D E  
 188 F A D B C E D

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 199 D A F C F A F  
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 202 C A F B D B F  
 203 A B E D E C F  
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 A E F A C A E A E A D C B A  
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 C F D A E B E A A A F B B B  
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 A E B A A A B C C C C B C C  
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 D B C C B C C B D E B C C E

## CONTACT

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 3 E B B C C B B E E A A C A D D A  
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28	E E A A A A A B B A A A A A A A
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51	D C B B A A A A A A A A A A A
52	E B A A B B B E C A A A A A A A
53	B A A A A A A A B A A A A A A A
54	E A A A A A B A A A A B A A A A
55	D B B A A A B A A A A A A A A A
56	B A A A A A A A A A A A A A A
57	D C A A A A B A A A A A A A A A
58	C C B B A A C A A A A A A A A A
59	E B A A A A B A A A A A A A A A
60	E C A A A A A A A A A A A A A
61	E B B A A A A A A A A A A A A A
62	E D B B A A B D A A A A A E B A
63	E C A A B A B A A A A A A A A A
64	E C A A A A A A A A A A A A A A
65	E C A A A A A A A A A A A A A A
66	E C A A A A A A A A A A A A A A
67	E B A A A A B A A A A A A A A A
68	A B B C A C B B C A A B A B B A
69	E A E A A C B A A A E A A A A A
70	E B A A A A B A A A A A A A A A
71	E C A A A A A A A A A A A A A A
72	D A A A A A A A A A A A A A A A
73	E C C D A A B B A B A A B A A B
74	E B A A A A A A A A A A A A A A
75	D C D D A A B B A A A A A A A A
76	E C B A A A B B A A A A A B A A
77	E B B A A A B A A A A A A A A A

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78	E A A A A A B A A A A A A A A
79	E B B B A A B A A A A A A A A
80	E D A A A A A A A A A A A A A
81	D C A A A A A A A A A A A A A
82	A A A A A A A A A A A A A A A
83	E B B A A A B A A A A A A A A
84	E B B A B C B A B A B A A A A A
85	E C A A A A A A A A A A A A A
86	E B E E D B B E A A A A A E B C
87	E B B A A A B A A A A A A A A A
88	A E A A A A B A A A A A A A A A
89	E C B B A A B A A A A A A A A A
90	E C C B A A C A A A A B A A B A
91	E C A A A B B A A A A A A A A A
92	D D C B A A B A A A A B A B A A
93	E D D C A A A D A A D A A D B B
94	E B B A C A B A A A A A A A A A
95	E B B B A A A A A A A A A A A A
96	E B A A A A B A A A A A A A A A
97	E C A A A A C A A A A A A A A C
98	E B B B A C B B A A A A A A A B
99	E A A A A A A A A A A A A A A A
100	B B A A A A A A A B A A A A A A
101	E C A A A A B A A A A A A A A A
102	E B A A A A B A A A A A A A A A
103	C B B E A A C A B A A A A A A A
104	D C B B B A A D A A B A A A A A
105	D C A A A A A A A A A A A A A A
106	C B B C A A B A A B B A A A A A
107	B A A A A A B A A A A A A A A A
108	E D B A A A C A B B B A A A A A
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110	E C C B A A B B A A A A A B A A
111	D C A C A A C B D A D A A A A A A
112	C D E D A C B C A A A A A A A A
113	E D E D A A C A A D A A A A A B
114	E A B A A A C A A A A A A A A A
115	E D B B A A C C A C A A A A A B
116	E C B A A A C C A B A A A A A A
117	E D B B A A B A A A A A A A B A
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119	E D E B A D C E A A A A A A A A
120	E D A A A A C A A B A A A A A B
121	E B A A A A C A A A A A A A A A
122	E D E E D D E E C C D C A E D A
123	E E D E A C E A C A E A A A A A
124	A B E E B C C B B B B B B A B A
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126	E B D B A B B B B A A A A A B A
127	E C E E C C C E B D E A A E D A

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128	E C E E A A C C B D C A A A B A
129	E D E E D B D E C C C C A C B A
130	D D A E A A B B A C A A B A B C
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148	E B E E D A B C B B E A A E B A
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176	E A A A A C A A B A A A A A A A



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177	E C A A D A C B B C A C B A A A
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203	E B C E C A D D C D B C B B B B
204	E A E E D C C D D A E A C E D A