Aptitude, Attitude And Motivation In Second-language Acquisition

Henry John Feenstra

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APITUDE, ATTITUDE, AND MOTIVATION
IN SECOND-LANGUAGE ACQUISITION

by

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Submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

Faculty of Graduate Studies
The University of Western Ontario
London, Canada
November, 1967

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ABSTRACT

Research concerned with determinants of second-language achievement has dealt primarily with language aptitude and motivation. In recent years, the motivational determinants of second-language learning received a great deal of attention, and there is a growing opinion that the nature of the second-language learning process will not be fully understood until the role and source of these motivational determinants have been isolated.

This investigation was designed to extend and clarify the interrelationships among various aspects of the aptitude and motivational determinants of second-language learning. A total of 124 grade IX students, who were not repeating that grade, were administered a battery of tests designed to measure language aptitude, general intelligence, verbal reasoning, and facility with English words. They also completed questionnaires which contained scales designed to determine their attitudes toward French-speaking people, their reasons for studying French, the amount of effort they were willing to expend in attempting to learn French, and their study habits. In addition, the questionnaire contained items designed to measure authoritarianism, ethnocentrism, and cultural allegiance. Indices of English language performance, as indicated by marks in
in the elementary school grades, were gathered from existing
school records. The criteria of French language achievement
included course grades at the end of the first and second terms,
objective measures of French vocabulary, grammar, and pronunciation
knowledge, and a rating of French oral reading and French free speech
fluency. In addition to the student attitude measures, similar scales
were designed to obtain from parents of the subjects, their attitudes
toward French-speaking people, their reasons for having their child
study French, an indication of their child's study habits, and
measures of authoritarianism, ethnocentrism and cultural allegiance.

A factor analysis performed on the data obtained from
both students and parents, resulted in eight interpretable factors.
Factor I indicated that Language Aptitude, as defined by a modern
language aptitude test and general intelligence, was a major
determinant of those aspects of French achievement which appear to
be stressed in school. Factor II, defined as an English Knowledge
factor, showed that measures of first and second-language achievement
share common variance, and was interpreted as an indication that skills
learned while mastering a first language transfer to the second-
language learning situation. Factor III demonstrated that School
French Achievement, involving those aspects of language which
are stressed in the school situation, is dependent not only upon
specific language learning abilities, but also upon a dimension of
'studentship', as defined by students' study habits. The complex of
motivational variables isolated in Factor IV and labelled Student
Motivation to Learn French, was found to be dependent upon students'
attitudes toward French-speaking people. Furthermore, a high degree of this motivation was found to facilitate the acquisition of those language skills which are involved in direct communication with French-speaking people. In Factor V, Parent French Attitudes, it was found that parents with positive attitudes toward French-speaking people tend to encourage their children to learn French. Factor VI was labelled a Student Ethnocentrism factor. There were indications that negative feelings toward minority groups hinder the acquisition of French language skills. Factor VII, Parent Ethnocentrism, demonstrated that a direct relationship exists between parents' ethnocentric attitudes and various aspects of students' ethnocentric attitudes. Factor VIII reflected differences in second-language aptitude and performance attributable to differences in sex, and was thus labelled a Sex Differences factor.
ACKNOWLEDGEMENTS

Acknowledgement is here made to the Director of Education for the city of London, Mr. W. D. Sutton, the superintendent of secondary schools for the city of London, Mr. I. R. Sanderson, the principal of South Secondary School, Mr. R. T. Macauley, the teaching staff and the students at South Secondary School, without whose cooperation this study would not have been possible. A special expression of appreciation is directed to Mrs. S. Pearen and Mrs. J. Sawyer for their tireless effort in the typing of the many reports, questionnaires, and final draft of this study.

Finally, I wish to thank my wife Jane for her encouragement and patience while this study was being completed.
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INTRODUCTION

During the last two decades, increasing interest has been directed toward the problems associated with second-language learning and bilingualism. Evidence of this interest can be seen in the number of publications in this area (Hobday, Wigmore and Bailey, 1963), and in the fact that within the last decade at least two international conferences dealing with the problem of bilingualism and second-language learning have been held. The first of these conferences, sponsored by U.N.E.S.C.O. (Department of Education and Science), was held in Aberystwyth, Wales in 1960. The topic of this conference was "Bilingualism in Education". The second such conference was held in Moncton, New Brunswick in 1967, and had as its topic "The Description and Measurement of Bilingualism". Recently, an entire issue of the Journal of Social Issues (April, 1967) was devoted to a discussion of "Problems of Bilingualism". The editor of the issue, Dr. John MacNamara illustrated the complexity of bilingualism by stressing that scientists from various disciplines must cooperate if the phenomenon is to be understood.

This study deals with the process of second-language learning. The acquisition of a second language constitutes a formidable task for students at all levels of education. Students who are successful in other subjects sometimes experience considerable difficulty with
language. For example, in London, Ontario, where French is the second language studied by high school students, examination of the failure rates in various subject areas demonstrates that second-language learning does create difficulties. Of all boys who studied French in the five-year program (1965-66) at the grade nine level, over 51% received a mark of 60 or less in this subject. Comparing this figure with those obtained for other academic subjects (i.e. Mathematics 50%, History 48%, English 46%, Geography 38%, Science 35%), it may be noted that French causes more difficulties than other subjects. Of all girls who studied French in the five-year program (1965-66) at the grade nine level, over 34% received a mark of 60 or less in this subject. Even though certain other academic subjects had a slightly higher failure rate than French for girls, (i.e. Mathematics 47%, History 37%, Science 35%), it is obvious that this subject creates problems for students of both sexes. Failure to cope with the second-language programme can have serious consequences for a student's academic career, in that it determines whether or not he can enter an academic course.

One reason for the difficulty in acquiring a second language may lie in the nature of second-language learning. It has been suggested (Gardiner, 1960; Lambert, 1963) that the acquisition of a second language appears to involve two tasks. One is the acquisition of a new 'linguistic code'; the student must learn new and different symbols to represent various concepts. That is, for the English-speaking student, the word 'house' formerly represented a structure in which people live, but as a student of French, he must now learn
that another word, 'maison' can also be used to represent that same concept. The second task involves the acquisition of cultural behaviour patterns which are characteristic of the cultural-linguistic groups whose language is being studied. That is, the word 'maison' is more than another symbol representing the concept of 'house', it is a symbol used by French cultural groups. Research concerned with these two tasks has dealt respectively with the concepts of language aptitude (Carroll, 1958) and motivation (Gardner and Lambert, 1959). The present study is concerned with both facets of second-language acquisition.

Language Aptitude

Emphasis upon the acquisition of a 'linguistic code' stresses the role of specific abilities in language learning. The typical approach has been to assume that a series of abilities is related to second-language performance and then to measure these abilities (Carroll, 1958). The earliest studies in the area of second-language acquisition were concerned with demonstrating that measures of specific language-learning abilities were more predictive of language achievement than were indices of general intelligence (Hermon, 1929; Symonds, 1929). The value of such tests, however, was questioned by a factor analytic study (Wittenborn and Larsen, 1944) which demonstrated that much of the variance common to language aptitude measures was related to intelligence, and not to second-language achievement. The factor structure suggested that the obtained correlations between indices of language aptitude and foreign-language achievement could be
interpreted in terms of skill in the first language. That is, the pattern indicated that measures of first and second language achievement all loaded highly on a single factor, labelled 'language usage'.

Several studies have been concerned with delineating the basic dimensions of language aptitude. Carroll (1958) analyzed correlation matrices obtained from batteries of tests administered to two different samples of Air Force personnel enrolled in a 1-week trial course in Mandarin Chinese. He found that language achievement was related to three factorially distinct abilities, which he labelled linguistic interest, associative memory, and an inductive language-learning ability. On the basis of subsequent research (Carroll, 1962; Carroll and Sapon, 1959), it has been postulated that the total complex of language aptitude is comprised of five different abilities, the above three plus sound-symbol association and verbal knowledge.

The relationship of such specific language-learning abilities to intelligence and second-language achievement has been investigated by Gardner and Lambert (1965). Employing a factor analytic technique, they demonstrated that indices of intelligence were factorially distinct from both language aptitude and second-language achievement measures. Furthermore, specific second-language skills were factorially linked with specific language-learning abilities. The only variable related to intelligence which seemed important in second-language acquisition was the Reasoning subtest of the Primary Mental Abilities Test (Thurstone and Thurstone, 1941). In fact, one
of the dominant factors identified was interpreted as 'Linguistic Reasoning'. This finding is consistent with results reported by Pimsleur, Stockwell, and Comrie (1962), who found that verbal reasoning was a good predictor of second-language achievement.

The results discussed here clearly suggest that language-learning abilities, though relatively independent of intelligence, are related to second-language achievement. They do not, however, account for all of the variance in second-language performance. It is possible, therefore, that other variables influence second-language acquisition. One such variable is the student motivation to learn the second language. The next section deals with the relationship of motivation to second-language acquisition.

Motivation

Research on the second task, the acquisition of behaviour patterns which are characteristic of another cultural-linguistic group, has involved studies dealing with the concept of motivation (Gardner et al., 1959). Under the general heading of motivation, one could postulate any number of motives which might play a role in acquiring a second language, such as an exploratory drive, fear of failure, need achievement, or need order (Travers, 1954). Gardner (1960) has suggested that such motives probably are operative only during short periods of time and that various strategies could be employed to meet the needs mentioned. For example, he has suggested that novelty might diminish as the study of the language progresses, and fear of failure could be overcome through intensive study prior to the examination or by studying only those aspects of the language
which will be examined. He has further suggested that need achievement
could be fulfilled by so preparing oneself for the examination that one
is assured that he will succeed, and need order could be fulfilled
by learning the grammatical and syntactical rules of the language. He
reasoned that it is unlikely that these motives play an important role
in the acquiring of a second language, which typically is a long-
term exercise, and that one must, therefore, look elsewhere for
motives which will have their effect over a long rather than a short
term.

Theories of first-language learning have stressed the importance
not only of maturational and ability factors, but also of motivational
variables. The particular motivational concept, central to this
theorizing, which has served as the basis for the consideration of the
role of motivation in second-language acquisition has been the concept
of 'identification', as proposed by Mowrer (1950) and extended by
Ervin (1954). Gardner et al., (1959) and Gardner (1966) have further
extended this concept of 'identification' in an attempt to explain second-
language acquisition. They have placed the concept within the framework
suggested by Dunkel (1948), who proposed that there are two aspects of
motivation in second-language study; the kind of motivation (referring
to objectives and purposes), and the intensity or degree of effort
expended. They argue that second-language acquisition involves the
acquisition of behaviour patterns which characterize another ethnic
group and that the individuals' attitudes toward that group will
influence the extent to which the language will be acquired. They
hypothesized that an Integrative Motive defined as "a willingness to
be like members of the other linguistic community" (Gardner et al., 1959) mediates second-language acquisition. Such a willingness could originate from a desire to communicate with members of the other linguistic community, or from a feeling of dissatisfaction with one's own cultural-linguistic community.

In initial attempts to classify reasons for studying a second language, Gardner et al. (1959) have suggested that, where the aim of the language study is to learn more about the people involved, or in some way become more like them, the underlying motivation could be called 'integrative'. Where the reasons for studying the language appear to reflect the more utilitarian value to be gained from achieving proficiency in the language, the underlying motivation could be called 'instrumental'. For example, one might study a language simply because this is a curriculum requirement, and in order to complete a given course, a necessary condition is that the individual successfully complete the language requirement. Such 'instrumental' motivation has been viewed as being in contrast with 'integrative' motivation, in that it does not involve active communication with or a liking for the cultural-linguistic community whose language is being studied (Gardner et al., 1965).

That something like the 'integrative motive' does operate in second-language acquisition is indicated by numerous observations. Whyte and Holmberg (1956) report that, among Americans working in Latin America, those who believed that they shared physical attributes with the Latin Americans, and were willing and even desirous of meeting with them on a plane of social equality, learned the language and
became more fluent than workers who would not make this identification. Lambert (1955), in a study of bilingualism noted one native English-speaking American graduate student who measured significantly dominant in French. Upon interviewing this student, it became apparent that he showed not only a dissatisfaction with U.S.A., but reacted against anything that was not European. He read only French newspapers and claimed that he had recently been to France and was returning there as soon as possible. A case history, cited by Nida (1956), illustrates the influence of an identification - like element in second-language achievement, but demonstrates how a strong desire to be integrated in one linguistic group can deter the acquisition of another language. He describes the case of Mr. B., a missionary who had extreme difficulty in acquiring a usable level of foreign language proficiency despite good teachers, a good deal of effort and adequate intelligence. Analysis of his personal history indicated that his parents had emigrated to the U.S.A. and that, as a boy, Mr. B. had dissociated himself from the cultural background of his parents and insisted on always speaking English. His desire for integration with the American culture was so intense that he denied knowledge of the parental language. Nida suggests that, because of his extreme identification with English, Mr. B. never did overcome his intense emotional reaction to a foreign language.

Other studies have reported attitudinal differences associated with second-language achievement which are consistent with the "identification" hypothesis, but are not as direct as those suggested
by Nida (1956) and Lambert (1955). Lambert, Hodgson, Gardner, and Fillenbaum (1960) found that students who rated themselves reasonably bilingual obtained significantly lower scores on the California F-Scale (Adorno, Frenkel-Brunswik, Levenson, and Sanford, 1950) than students who rated themselves relatively monolingual. Similarly, Gardner (1958) found that adults enrolled in senior French classes in night school tended to receive lower F-scale scores than adults in the elementary French courses. Since the F-scale presumably measures authoritarian attitudes or a tendency toward ethnic prejudice, (Adorno et al., 1950) these findings suggest that second-language achievement is facilitated by a favourable and accepting orientation toward outgroups. Further evidence of the relationship between attitudes toward another cultural-linguistic group and language study have been presented by Lambert, Gardner, Barik and Tunstall (1962). They studied American students who were enrolled in an advanced French course at a summer school in Montreal. The interest of the investigators was in finding attitude changes which were concurrent with French study. During the six weeks of French study, those students who contended that they progressed in French skill to the point that they thought and even dreamed in French, were those who also indicated that their feelings of dissatisfaction with their own cultural-linguistic community, as measured by Srole's (1951) Anomie scale, also increased and, furthermore, that they began to seek occasions to avoid French. The investigators concluded that as students begin to master a language, their feeling of anomie increase.

The first studies which considered both aptitude measures and
motivational variables based upon the 'identification' concept were carried out with native English-speaking students in Montreal. In a study reported by Gardner et al., (1959), the measures included the Orientation Index, the Motivational Intensity Scale, Attitudes toward French-Canadians, and the California F-scale, as well as the Modern Language Aptitude Test (Carroll et al., 1959), two indices of verbal intelligence, and an Audience Anxiety Scale (Paivio and Lambert, 1959). The measure of French achievement used was the sum of the French teacher's rating of the student's oral proficiency and aural comprehension. A factor analysis of the resulting correlation matrix clearly demonstrated that two independent factors were important for the successful acquisition of a second language. That is, French achievement was related both to Language Aptitude and to the complex of attitudinal and motivational variables designed to measure the integrative motivation. The results indicated that an integrative orientation, positive attitudes toward the language groups involved, and a high degree of motivation interacted to account in part for success in second-language achievement, and this was interpreted in terms of the integrative motive. One of the problems in the interpretation of these results lay with the criterion of French achievement used. Gardner (1966), discussing the Gardner et al., (1959) study, suggests that it might be argued that the teacher ratings of French proficiency could have been influenced by the students' interest and motivation. Thus, the apparent relationship between the motivational variables and the criterion could have been accentuated. In order to counteract
such a criticism, a second study was devised (Gardner, 1960), where not only aptitude and motivational variables were included, but also various objective measures of French achievement as well as teacher grades. A factor analysis of the obtained correlation matrix suggested that those French skills which are stressed in the school situation appeared to be more highly dependent upon language aptitude than upon a desire to learn the language for the purpose of integrating with the French-Canadian community. On the other hand, language skills which are developed mainly outside the classroom, as one interacts with members of the cultural-linguistic community, appeared to be more highly related to the measures of the integrative motive. The factor pattern suggested that integratively-oriented students tended to come from homes where the parents also professed an integrative orientation and where the parents had definite pro-French attitudes. It was suggested that the students were possibly reflecting the parents' attitudes in their choice of orientation. Since there was a clear relationship between the orientation of the student and second-language achievement, Gardner (1960) suggested that, to some extent, the degree of skill which the students attained in the second language was dependent upon the home attitudes toward the other linguistic group. Parents who had favourable attitudes toward the French-speaking community might encourage their children to study French to a greater extent than would parents with unfavourable attitudes.

In order to study the degree to which results obtained in
Montreal could be generalized to other cultural areas, Lambert, Gardner, Olton, and Tunstall (1961) studied samples of students in Louisiana, Maine, and Connecticut. These three areas each had a French-speaking community. In each area students do not begin formal French instruction until they enter high school, but the areas differed in the availability of French-speaking people. In Connecticut, no such group existed, whereas in Maine and Louisiana a prominent French-speaking community was available. The results obtained in these areas indicated that language aptitude shares considerable variance in common with measures of second-language achievement, particularly of those skills stressed in the school situation. Also, the motivational variables were related to measures of language achievement. The major difference between these results and those obtained in the Montreal setting appeared to lie in the lack of interdependence of the measures of the integrative motive, and in the different type of attitudes related to achievement. In all studies, the measures of motivation and orientation shared variance in common with indices of language achievement. Only in the Montreal setting, however, was the integrative orientation clearly associated with the motivational variables.

Furthermore, in the Montreal setting, the integrative orientation was associated with favourable attitudes toward the French-speaking community. In the American settings, the integrative orientation and the motivational components were independent of each other, though both factors were associated with second-language achievement. In addition, the American students' attitudes toward the French-speaking community
were independent of the student's orientation, motivation, or language achievement, whereas a dimension of authoritarian attitudes was negatively related to second-language achievement. Gardner (1966) suggests that whereas motivational variables are important for achievement in a second language, the nature of the motivational component will differ as a function of a number of other variables, the most important one being the availability of the cultural-linguistic community whose language is being studied. Another such variable has been demonstrated by Sherer and Wertheimer (1962), who found that students trained with the audiolingual method were more motivated to learn the language, demonstrated a more integrative orientation, and held more favourable attitudes toward French-speaking people than those receiving the more traditional programme. Gardner (1966) suggests that in that particular situation the characteristics of the integrative motive appear to be amenable to influence or change by the training programme.

In the studies reviewed, the investigators have ignored student's performance in the first language, even though an inspection of the factor matrix reported by Wittenborn et al., (1944) reveals a close relationship between performance in the first and second language. First-language performance prior to the introduction of the second language may have its influence in one or both of two possible areas. It may be that students who have an aptitude for language study perform well in both first and second language studies. One would then expect a high positive relationship between
school performance in the first and second language. On the other hand, first language performance may have its effect through the motivational variable complex. One could speculate that students, who have performed well in their first language have, by experience, discovered that they have a facility for language learning. When such students reach the high school level, where second-language learning is introduced, they have no reason to believe that they will be unable to manage this subject area. Students who have not performed successfully in first language studies, however, may well feel that they cannot learn languages, either first or second. Such students bring an unfavourable attitude toward the study of the second language. It is possible that such unfavourable attitudes toward an academic exercise could generalize to include the cultural-linguistic community and a student's orientation in studying a language. Poor first-language performance could thus have a detrimental effect upon subsequent second-language performance. To investigate this possibility, one must select a sample of students who have not yet been exposed to a formal second-language learning programme. By gathering motivational and attitudinal data prior to this formal training, it would be possible to relate past performance in the first language both to attitudes toward the cultural-linguistic community represented by the second language, and to performance in the second language. The studies conducted by Gardner (1958; 1960), Gardner et al., (1959), and Lambert et al., (1961) have typically included students with widely varying periods of exposure to a formal second-language programme.

The purpose of the present study was to extend and clarify the
findings reported by Gardner (1960), Gardner et al., (1959), and Lambert et al., (1960). First of all, the motivational and attitudinal measures were gathered at a time prior to extensive exposure to a formal French language program. Thus, attitudes expressed by students cannot be attributed to student performance in the second-language program. Secondly, the relationship between student attitudes and those expressed by their parents in relation to the second-language area was examined further. Gardner (1960) interviewed parents of students included in his sample. The results of this preliminary work suggested a relationship between the two sets of attitudes and suggested further that parent attitudes might have an important bearing on their children's subsequent second-language performance. To clarify this area, responses from parents were obtained on essentially the same items as those administered to their children. Finally, the research was conducted in Canada, where French is one of the official national languages, but in the setting used students cannot readily associate with members of a substantial French-speaking community.
METHOD

Subjects

During the 1966-67 academic year, 153 students from the grade nine classes at South Secondary School in London, Ontario were tested. Of these, only the students who were attempting grade nine for the first time, and whose parents completed the questionnaires were included in the analysis. Thus, the data analysis is based on 124 students, 65 girls, and 59 boys.

Variables

The following variables were included in the analysis.

(1) Sex

For the purposes of analysis, males were coded as 1 and females as 2.

(2) Disarranged Letters

The Ss were presented with words with the letters disarranged; the task was to write the word correctly. For each group of items a class name was given. For example, under the general heading of ANIMALS, the letters e b a r appeared, and Ss were to form the word BEAR. This was a speeded test, with a four-minute limit to complete six groups of seven words each. This test measures the ability to generate meaningful groups of words, the meaning being governed by similarity of word function. The test is adapted from Carroll (1958)
and is reproduced in Appendix A.

(3) Disarranged Words.

In this test, two words, an adjective and a noun were split into several segments, and the parts disarranged. Ss were allowed four minutes to rearrange these parts to produce the 25 pairs of two words each. High scores on this test indicate an ability to produce meaningful pairs of words, the meaning being governed by a grammatical limitation. The test was adapted from Carroll (1958) and is reproduced in Appendix B. A sample item is:

\[
\begin{array}{ccccc}
1 & 2 & 3 & 4 & 5 \\
\text{ing} & \text{able} & \text{dark} & \text{notice} & \text{en}
\end{array}
\]

The correct answer is noticeable darkening.

Variables 4 - 8 were the subtests of Carroll and Sapons' (1959) Modern Language Aptitude Test (tape-recorded version).

Descriptions of the psychological functions measured by these tests were adapted from Carroll and Sapon (1959).

(4) Number Learning

A number system consisting of nonsense syllables corresponding to the numbers 1, 2, 3, 4; 10, 20, 30, 40; 100, 200, 300, 400 was presented to the Ss. Following an acquisition period, during which time Ss were instructed on how the nonsense syllables could be combined to form numbers, Ss were presented with combinations of these nonsense syllables and required to provide Arabic equivalents. This test measures both a memory component and a general auditory-alertness factor.
(5) Phonetic Script

The Ss were provided with 30 sets of four nonsense syllables written phonetically. The examiner read five such sets aloud, then selected one syllable from each set, read it, and asked the Ss to mark the one he had read. This procedure was continued until all sets had been read and tested. This test is a measure of both memory for speech sounds and the ability to learn the correspondence between speech sounds and orthographic symbols.

(6) Spelling Clues

The Ss were presented with 50 groups of five words each. At the top of each group was a word which was spelled approximately as it is pronounced. The Ss were required to recognize the disguised word from its spelling, and to select, from the five words beneath it, the word which most accurately gave the meaning of the disguised word. Scores on this test depend both upon the student's English vocabulary knowledge and his sound-symbol association ability. Five minutes were permitted for the completion of this subtest.

(7) Words in Sentences

The Ss were presented with 45 groups of sentences. The first or key sentence in each group contained an underlined word or group of words. To complete the test, Ss were required to examine underlined, labelled sections of the other sentences in the group and to determine which of these sections performed the same grammatical function in its sentence as the underlined word or group
of words did in the key sentence. This test measures a student's sensitivity to grammatical structure. Although it is obvious that knowledge of English grammar is important for achievement in this test, grammatical terminology was not used. Thus, it has been assumed that high scores on this test require more than memory for specific grammatical terminology. The Ss were allowed 20 minutes to complete this subtest.

(8) Paired Associate Learning

A vocabulary list, consisting of 24 pairs of nonsense forms and English words, was presented to the Ss, who were allowed two minutes to memorize the list and another two minutes to practise the recall of the English equivalents. At the end of this time, Ss were presented with the nonsense forms, and were required to select the English equivalent from five alternatives. A time limit of four minutes was imposed. This test is a measure of the student's rote memory ability as it applies to the learning of a foreign language.

(9) Intelligence

The Dominion Intermediate Intelligence Test was administered by the school guidance staff to all grade nine students.

(10) Verbal Reasoning

The Verbal Reasoning Subtest of the Canadian Test Battery (1962) was administered by the school guidance staff to all grade nine students.

Variables 11 to 14 represent past performance in English.
From the existing student records, students' final marks in English Composition, English Literature, English Grammar, and English Spelling were obtained for grades five through eight. For each student, the marks for each grade were averaged to provide an English-language performance score for that grade. If a student repeated a grade, his marks for the second year in the grade were used.

(11) Grade Five English Performance
(12) Grade Six English Performance
(13) Grade Seven English Performance
(14) Grade Eight English Performance

Variables 15 to 26 were included in a student questionnaire booklet (See Appendix C). The symbol (S) in the following variables indicates that the variable refers to a test administered to the students. Items from Variables 15-19 were placed at random within three scales labelled Scale A, Scale C, and Scale F, with approximately 20 items in each scale. Students were asked to rate their agreement or disagreement with each item, by endorsing one of six alternatives ranging from "strong support, agreement", to "strong opposition, disagreement". Scoring was done on a seven-point scale, with a score of four being reserved for the neutral position, or when a student failed to choose an alternative for a particular item.

(15) French Attitude Scale (S)

The Ss were presented with 20 positively worded statements about French-speaking people. A high score on this scale indicated a positive attitude toward French-speaking people. This scale was
adapted from Lambert et al., (1961). A sample item is: "French-speaking people set a good example for us by their family life".

(16) Anomie Scale (S)

The Ss were presented with 12 items designed to measure an individual's dissatisfaction with his role in society. A high score indicated a high degree of such dissatisfaction. This scale is based on Srole's (1951) Anomie scale but included additional items developed by Lambert et al., (1961). A sample item is: "These days, a person doesn't really know whom he can count on."

(17) Ethnocentrism Scale (S)

This scale was adapted from the Ethnocentrism Scale for children (Frenkel-Brunswik, 1948). A high score indicated an ethnocentric orientation. A sample item is: "Foreigners are all right in their place, but they carry it too far when they get too familiar with us."

(18) Cultural Allegiance Scale (S)

The Ss were presented with ten items, designed by Lambert et al., (1961), directly comparing French-speaking and non-French-speaking people, with a high score indicating a preference for French-speaking people. A sample item is: "People are much happier in France than they are here."

(19) California F-scale (S)

The Ss were presented with 13 items selected from the California F-scale (Adorno et al., 1950). A high score on this scale indicates a high degree of authoritarianism.
(20) Orientation Index (S)

Under the heading of "I am studying French because", Ss were presented with four possible reasons, two of these indicating an "instrumental" orientation (e.g., I think it will someday be useful in getting a good job) and two indicating an "integrative" orientation (e.g., It will allow me to meet and converse with more and varied people). Ss were asked to rank the reasons in the order of their importance to him. Each S was then classified as being either "instrumentally" or "integratively" oriented depending upon the alternative which was listed as the first choice. For the purposes of this study, an instrumental orientation was listed as "1" and integrative orientation as "2". All items were adapted from Lambert et al., (1961).

Items from Variables (21) and (22) were included in a single scale, with items from the two variables appearing alternately. All items were adapted from Lambert et al., (1961).

(21) Instrumental Rating (S)

Each S was presented with four "instrumental" reasons for studying French. He was asked to rate each reason, indicating the extent to which it was descriptive of his own attitudes. A high score indicated a high "instrumental" orientation toward the study of French. A sample item is: "I need it in order to finish high school."

(22) Integrative Rating (S)

Each S was presented with four "integrative" reasons for studying French. He was asked to rate each reason, indicating the extent to which it was descriptive of his own attitude. A high score
indicated a high "integrative" orientation toward the study of French. A sample item is: "It will enable me to gain good friends more easily among French-speaking people."

(23) Desire to Learn French Scale (S)

The Ss were presented with nine multiple-choice items from the Desire to Learn French scale developed by Lambert et al., (1961). These items were designed to measure the extent to which a student wants to learn French. Items included a consideration of a preference for the French course, eagerness to do assignments and pay attention in class, interest in the French course, and interest in making use of the French language. The wordings of these items is such that high scores on this scale reflect a high desire to learn French. A sample item is: "If I had the opportunity and knew enough French, I would read French newspapers and magazines a) as often as I could b) fairly regularly c) probably not very often d) never."

(24) Motivational Intensity Scale (S)

Ss were presented with seven multiple-choice statements from the Motivational Intensity scale designed by Lambert et al., (1961). These items were designed to measure the intensity of the motivation to learn French in terms of work done for assignments, future intentions to study and make use of the language, amount of practice given to the language, and importance attributed to a knowledge of the language. Ss were asked to choose, in each case, the alternative most descriptive of himself. High scores on this
scale represent high motivational intensity. These items differ from those in Variable 23, in that they reflect the amount of effort spent in acquiring the language rather than an attitude toward learning French.

(25) Perceived Parental Encouragement to Learn French (S)

Ss were asked to rate, on a 7-point scale, the extent to which their parents encourage them to study French. The six items designed by Lambert et al., (1961) included pressure to complete homework in French, and expressed attitudes toward the value of studying French. High scores indicated substantial encouragement to study French. A sample item is: "My parents feel that studying French is a waste of time."

(26) Attitudes Toward Learning Any Foreign Language (S)

Ss were presented with seven multiple-choice items designed to measure their general attitude toward learning any foreign language. The items made reference to the wish to be able to speak another language, and the effort the student would exert to learn a second language if it were not taught at the high school level. A sample item is: "I want to read the literature of a foreign language in the original."

(27) Study Habits (S)

Ss were presented with 25 multiple-choice items (See Appendix D) selected from the Brown-Holtzman (1953) Survey of Study Habits. High scores on this questionnaire reflect responses which indicate favourable study habits. A sample item is: "Even though an assignment is dull and boring, I stick to it until it is completed."
Early French

The school records were examined to determine if each S had had lessons in French prior to grade nine. If the records indicated that a student had received formal lessons in French involving either conversational French or the study of grammatical structure, for at least a six month period, that student was considered to have had prior French instruction and was listed as "2". All other students were listed as "1".

Variables 29-38 were obtained from answers to questionnaires sent to parents of the Ss (see Appendix E). The items, format, and scoring of Variables 29-33 were similar to those described for Variables 15-19. The symbol (P) indicates parent questionnaire variables.

(29) French Attitude Scale (P)

(30) Anomie Scale (P)

(31) Ethnocentrism Scale (P)

Upon the advice of various school board administrative officials, three items from the original ethnocentrism scale for students were deleted. This scale thus consisted of four items.

(32) Cultural Allegiance Scale (P)

(33) California F-scale (P)

(34) Orientation Index (P)

This scale was similar to Variable 20, with the exception that the parents were asked to rate the four alternatives on the basis of the reasons for having their child study French.

Items from Variables 35 and 36 were included in a single
scale, with items from the two variables appearing alternately.

(35) Instrumental Rating (P)

This variable was similar to Variable 21 with the exception
that parents were asked to rate the extent to which they feel each
item was a valid reason for having their child learn French.

(36) Integrative Rating (P)

This variable was similar to Variable 22 with the exception
that parents were asked to rate the extent to which they felt each
item was a valid reason for having their child learn French.

Items from Variables 37 and 38 comprised a single scale.
Parents were asked to provide, on a seven-point scale, agreement
or disagreement with various statements.

(37) Parental Encouragement to Learn French (P)

All six items from Variable 25 were reworded so they could
be answered by parents. For example, "My parents encourage me to
study French," was reworded to read "We, as parents, encourage our
child to study French."

(38) Perceived Study Habits (P)

Parents were presented with nine items selected at random
from those in Variable 27. All items had been reworded so they could
be answered by the parents. For example, "It takes me a long time to
get warmed up to the task of studying" was reworded to read "It
takes our child a long time to get warmed up to the task of
studying."

(39) First Term Mark - French

The grade each Ss received in French following one term of
formal French instruction at the grade nine level was obtained from school records. These marks are based on a formal examination stressing vocabulary and grammar and upon the student's term work. The formal examination accounts for approximately 75% of the mark.

(40) Second Term Mark - French

The grade each S received in French at the end of the second term of formal French instruction at the grade nine level was obtained from school records. These marks are based on a formal examination stressing vocabulary and grammar and upon the student's term work. The formal examination accounts for approximately 75% of the mark.

(41) General Academic Proficiency

The marks in academic subjects, with the exception of French, obtained by Ss at the end of the second term were obtained from the school records, and averaged to provide an index of the general academic proficiency of the students. Second term rather than final marks were used since Ss obtained this mark at a time very close to the administration of other criterion scores included in this battery.

Variables 42-45 are subtests of the 1961 version of the Canadian Achievement Test in French. Ss were allowed 60 minutes to complete the test.

(42) French Vocabulary

This subtest consisted of 35 multiple-choice items dealing with English to French translations, French to English translations, French antonyms, and French sentence completions. A high score on this
subtest indicates a substantial knowledge of French words.

(43) French Grammar

This subtest consisted of 45 multiple-choice items dealing with English to French translations and French sentence completions. The emphasis was upon the grammatical correctness of certain structures rather than upon equivalent or idiomatic words and phrases.

(44) French Comprehension

Ss were presented with three selections of French prose, and were subsequently required to answer questions based upon these selections. High scores on this test indicate an ability to comprehend written French.

(45) French Pronunciation

This subtest consisted of 12 items where Ss are required to answer questions regarding the pronunciation of various French words. The emphasis is upon knowledge of how the word should be pronounced rather than upon ability to pronounce the word correctly.

(46) French Reading Fluency

The Ss read a standard passage of French dialogue into a tape recorder, after being instructed to practise the selection for two minutes (See Appendix F). Subsequently, a teacher of French and a bilingual secretary rated each oral production on a seven-point scale in terms of fluency. The emphasis for the ratings was upon the speed and ease with which the student read the selection. The score for each S was the average of the two ratings. Interscorer reliability for this task was 0.88.
French Speech Fluency

The Ss were presented with a card bearing the phrase "Chaque matin" and were instructed (See Appendix G) to prepare three or four French sentences which would follow from this beginning. Oral productions were tape recorded, and subsequently rated by a French teacher and a bilingual secretary on a seven-point scale. The emphasis for the rating was upon speed and ease with which Ss provided the three or four French sentences. The score for each S was the average of the two ratings. Interscorer reliability for this task was 0.75.

Procedure

Data for this study were gathered in six testing sessions conducted during the period of October, 1966 to May, 1967.

1. October 1

All the grade nine students at the school were seated in the school cafeteria, with a proctor assigned for each group of 25 students. Booklets, containing the questionnaires for the attitude measures comprising Variables 16-26, were distributed to all Ss. Before Ss answered questions in any of the scales, the experimenter explained the instructions and answered any questions. Ss were assured that their answers would not be seen by any school officials, and were asked to answer all questions as honestly as possible.

2. October 15-17

Each grade nine class was tested in a room made available by the school officials. The groups varied in size from 25 to 30.
Answer sheets for the Modern Language Aptitude Test (Tape recorded Version) were presented to each student. After answering all questions the experimenter started the tape recorder. Two proctors checked at the beginning of each subtest to be certain that Ss were using the correct section of the answer sheet.

(3) December 15

Each grade nine class was conducted individually into a testing room provided by school officials. The head of guidance of the school presented each student with the Study Habits Questionnaire and answered procedural questions. Students were asked to answer the questions honestly. No time limit was imposed upon the completion of the questionnaire.

(4) March 15

Booklets containing questionnaires for the attitude measures comprising Variables 29-38 were distributed to parents of the Ss, by sending them home with the grade nine students. A covering letter from the school principal accompanied each booklet. Parental signatures were not required, and parents were provided with blank envelopes in which to return the questionnaires to the high school. All questionnaire booklets, however, were coded in such a way that parents' responses could be matched with those of their children.

(5) May 1

All grade nine students were seated in the school cafeteria, with a proctor assigned for each group of 25 students. Question booklets and answer sheets for the Canadian Achievement Test in French were presented to each S. The experimenter explained the instructions
and answered procedural questions. Ss were allowed 60 minutes to complete the test.

(6) May 8–12

The investigator and an assistant were provided with two individual testing rooms, with a tape recorder in each room. One room was used to record the French free speech while the other was used to record the Ss reading of the French passage. Students were taken, two at a time, to the testing rooms to complete the two tasks. One student was taken into the first room and presented with a selection of French prose (See Appendix F). He was instructed (See Appendix F) to study it for two minutes, then read it aloud. His oral reading was tape recorded. At the same time, the other student was conducted into the second room and presented with a flash card containing the words "Chaque matin". He was instructed (See Appendix G) to think of three of four French sentences which might follow this beginning. After two minutes of preparation, he was asked to present these sentences orally. All oral productions were tape recorded. When both students had completed the first task, they exchanged rooms and completed the second task.
RESULTS AND DISCUSSION

Pearson product-moment correlations were computed between all continuous variables. The correlations between each of the continuous variables and the three dichotomous variables (Sex, Orientation Index, and Early French) were computed as point biserial correlations, while the intercorrelations of these three variables were computed as phi-coefficients. The resulting correlation matrix is shown in Table 1. This correlation matrix was factor analyzed using the Principal Axis solution, using as the communality estimates for each variable the absolute value of the highest correlation involving that variable. The factor matrix is shown in Table 2. The eight factors with eigenvalues greater than 1.0 were rotated using the Normalized Varimax Solution (Kaiser, 1958). The rotated factor matrix is presented in Table 3. All calculations were performed on an IBM 7040 digital computer.

Inspection of the variables comprising Factor I indicates that the 10 variables receiving the highest loadings involve measures of intelligence (Variable 9), language learning abilities (Variables 5, 4, 3, and 8), verbal reasoning (Variable 10), and French achievement (Variables 45, 42, 46 and 43). This pattern of variables suggests that Factor I is best labelled as a Language Aptitude factor, since the dominant component represented by the non-French achievement
measure appears to involve language-learning abilities. Moreover, the loadings of the French achievement measures on this factor would seem best interpreted as reflecting the dependence of achievement on these language abilities. Similar patterns have been obtained by Gardner et al., (1959), Gardner (1960), and Lambert et al., (1961), and such consistency would suggest that language aptitude is a reliable determinant of second-language achievement. Gardner et al., (1965) have suggested that the factorial similarity of indices of intelligence and language aptitude revealed in their studies (Gardner et al., 1959; Gardner, 1960) was due to the heterogeneity of measures included in their matrices. Such a criticism would also be relevant to the matrix analyzed in the present study. Nonetheless, it seems evident that Factor I describes a pattern of language abilities which is common to measures of intelligence as well as French achievement.

Lower loadings on Factor I are obtained by 14 additional variables. Of these, four are measures of French achievement (Variables 40, 39, 47 and 44), two are language ability measures (Variables 2 and 7), three are measures of prior English achievement (Variables 13, 14 and 11) and one is a measure of general academic proficiency (Variable 41). It seems reasonable to assume that Language Aptitude would be related to these measures but that the relationships generally would not be pronounced. Of particular interest, however, are the measures of French Achievement receiving low loadings on this factor. These include the two French grades, and the measures of French speech fluency and French comprehension. It would
appear that language aptitude is not as highly related to these aspects of French achievement as with the others mentioned earlier. This pattern with reference to French speech fluency and French comprehension has been obtained by Lambert et al., (1961). Thus, Language Aptitude can be considered to be more predictive of aspects of second language involved in oral reading (Variables 45 and 46), vocabulary (Variable 42), and grammar (Variable 43) than of French speech fluency (Variable 47). Lambert et al., (1961) have suggested that skills involved in reading, vocabulary, and grammar development are those most commonly stressed in the first years of foreign language instruction, whereas the skills involved in direct communication are probably not stressed as much. As will be seen in the discussion of Factor III, the present data support this interpretation. Lambert et al., (1961) furthermore suggested that Language Aptitude was a good predictor of school grades in French. The pattern obtained in Factor I however, clearly indicates that whereas Language Aptitude is differentially related to various aspects of second-language learning, it is not highly predictive of grades in French courses at the grade nine level.

The remaining four variables which receive loadings on Factor I include an indication of French instruction prior to grade nine (Variable 28), two measures of student attitude and/or motivation (Variables 19 and 21), and the anomie scale for parents (Variable 30). The pattern suggests that students with a high degree of Language Aptitude tend to be those singled out for special instruction. It
should be noted however, that intelligence contributes substantially to Factor I. Therefore, it is quite possible that those students are selected largely on the basis of general intelligence (Variable 28). Furthermore, they tend to have parents who express a certain degree of satisfaction with the English-speaking cultural community (Variable 30). These students also tend to be non-authoritarian (Variable 19), and seldom offer, as a purpose for studying French, a reason stressing the utilitarian or instrumental value of language study. Thus it would appear that two factors determine whether or not a student will receive early training in French-intelligence and home attitudes.

Factor II appears to reflect a dimension of English Knowledge. The four variables receiving the highest loadings involve indices of English (i.e. first-language) performance as indicated by teacher marks (Variables 12, 13, 11 and 14) while four other variables evidencing appreciable loadings include a sensitivity to grammatical structure (Variable 7), verbal reasoning (Variable 10), a facility with English words (Variable 2), and a measure of intelligence (Variable 9). In addition to these indices of English Knowledge, which clearly define the factor, three other variables receive appreciable loadings. These include a measure of French vocabulary (Variable 34), two indices of school French achievement (Variables 39 and 40), French comprehension (Variable 44), and fluency in reading and speaking French (Variables 46 and 47). This configuration implies that English Knowledge is related to French achievement.
suggesting that skills in English are transferred to the French learning situation. A similar pattern was reported by Wittenborn et al., (1944), where measures of German and English achievement were found to be factorially similar.

Lower loadings on Factor II are obtained by three additional measures, the students' French attitude scale (Variable 15), his integrative rating score (Variable 22), and sex (Variable 1). The pattern suggests that students who have favourable attitudes toward French-speaking people and who profess an integrative orientation, tend to be proficient in English. The pattern appears to be more characteristic of girls than of boys. Since Factor II is described as an **English Knowledge** Factor, it would seem that those students who have done well in mastering the English program, tend to have these positive attitudes toward French-speaking people. The relationship between **English Knowledge** and student attitudes toward French-speaking people may reflect an attitude which originates in a knowledge of one's ability to master a given program. That is, students, by the end of their elementary school years, are aware of their abilities and limitations in the area of language study. Those who have experienced considerable difficulty in mastering the English program may feel very negatively about the prospect of the inclusion of another language (e.g., French) in the curriculum. Such an attitude might be expected to generalize to French-speaking people, the cultural-linguistic group represented by the language. Similarly, students who have been successful in mastering the first-language program might have positive inclinations toward the inclusion of a
suggesting that skills in English are transferred to the French learning situation. A similar pattern was reported by Wittenborn et al., (1944), where measures of German and English achievement were found to be factorially similar.

Lower loadings on Factor II are obtained by three additional measures, the students' French attitude scale (Variable 15), his integrative rating score (Variable 22), and sex (Variable 1). The pattern suggests that students who have favourable attitudes toward French-speaking people and who profess an integrative orientation, tend to be proficient in English. The pattern appears to be more characteristic of girls than of boys. Since Factor II is described as an English Knowledge Factor, it would seem that those students who have done well in mastering the English program, tend to have these positive attitudes toward French-speaking people. The relationship between English Knowledge and student attitudes toward French-speaking people may reflect an attitude which originates in a knowledge of one's ability to master a given program. That is, students, by the end of their elementary school years, are aware of their abilities and limitations in the area of language study. Those who have experienced considerable difficulty in mastering the English program may feel very negatively about the prospect of the inclusion of another language (e.g. French) in the curriculum. Such an attitude might be expected to generalize to French-speaking people, the cultural-linguistic group represented by the language. Similarly, students who have been successful in mastering the first-language program might have positive inclinations toward the inclusion of a
second language in the curriculum and consequently express favourable attitudes toward French-speaking people.

The variables receiving the highest loadings on Factor III include measures of school academic achievement in French (Variables 41, 40 and 39), English (Variables 14, 13 and 12), objective measures of French performance (Variables 43, 42, 44 and 45), words in sentences (Variable 7), verbal reasoning (Variable 10), and measures of study habits as perceived by both students and their parents (Variables 27 and 38). The pattern of variables suggests that Factor III is best labelled as a School French Achievement Factor similar to that reported by Gardner et al., (1965), since the dominant component represented is one of French performance. The loadings of both English and French achievement measures as well as a measure of general academic proficiency on this factor suggest that school language achievement has elements in common with other academic subjects. The loadings of the intelligence and study habits variables on Factor III suggest that intelligent students, who work in a regular, orderly fashion do well in all subject areas, both in elementary and high school grades. The loading of measures of French grammar (Variable 42), French comprehension (Variable 44), French pronunciation knowledge (Variable 45), and French reading fluency (Variable 46) suggest that, in this school system, teachers' evaluations of French achievement are governed largely by those skills which involve written language rather than oral communication skills. The loadings achieved by Variables 7 and 4 suggest that students who are aware of English grammatical structure, and who demonstrate a
facility with tasks involving both memory and a general auditory alertness tend to do well in French courses where the emphasis appears to be upon writing and comprehending written French. One difference between the pattern isolated in Factor III and the School French Achievement factor isolated by Lambert et al., (1961) should be emphasized. This difference lies in the relationship between Language Aptitude measures and School French Achievement. Lambert et al., (1961) conclude that School French Achievement is dependent upon Language Aptitude. The present data clearly indicate that Language Aptitude is related to certain aspects of second-language achievement (Factor I) but not to School French Achievement.

Lower loadings on Factor III are obtained by three other measures. A positive loading is obtained by the students' desire to learn French (Variable 23), while negative loadings are obtained by the students' integrative rating (Variable 22) and the measure of parents' cultural allegiance (Variable 32). The pattern of variables suggests that School French Achievement is facilitated by an expressed desire on the part of the student to learn French. This desire appears to be associated with a home atmosphere which shows a relative preference of French over English-speaking people. The low negative loading achieved by the students' integrative rating is difficult to interpret. Since the loading obtained by the students' instrumental rating is also low, it might suggest that reasons for studying French other than those included in the integrative and instrumental rating scales are related to School French Achievement.
Inspection of the variables comprising Factor IV indicates that the variables receiving the highest loadings include five measures of student motivation (Variables 26, 23, 24, 22 and 21), as well as measures of their perceived parental encouragement to learn French (Variable 22), and study habits (Variable 27). This pattern suggests that this factor is best defined as a **Student Motivation to Learn French** factor. Moreover, the loadings suggest that students with positive attitudes towards French-speaking people tend to have a strong desire to learn French (Variable 23) and are willing to expend considerable effort toward attaining that goal (Variable 24). The loadings of the measures of student orientation toward French study (Variables 22 and 21) suggest that a dual orientation is evident in these students. On the one hand, they feel that a study of French will help them to better understand French-speaking people. On the other hand, they also feel that a study of French is important for its utilitarian value. This dual orientation may represent the distinction between immediate and long-range goals. The immediate goal may be to complete French as part of the curriculum requirement. The knowledge gained through this program will help them to better understand French-speaking people.

The lower loadings achieved by the measure of perceived parental pressure (Variable 25) and study habits as seen by the student (Variable 27) suggest that the student motivation to learn French is accompanied by parental encouragement, and by a regular, orderly pattern of work. A somewhat similar pattern was reported by Lambert et al., (1961) for students in Louisiana. The results were interpreted
as indicating, that, in that situation, strong parental encouragement served as a foundation for the motivation to learn French. This foundation may be specific to the geographical location of the school. Thus, for example, English-speaking students in Montreal appear to derive their motivation to learn French from a basic integrative orientation (Gardner, 1960), those in the Maine sample from identification with the French teacher (Lambert et al., 1961), and those in Connecticut from an integrative orientation combined with a realization of the potential usefulness of a knowledge of French (Lambert et al., 1961). Perhaps a further analysis of each location, including an analysis of social factors within each community, might indicate the source of these differences.

The loadings of three French achievement measures (Variables 42, 44 and 47) on this factor suggest that students with a strong motivation to learn French tend to have high scores in French vocabulary, comprehension, and speech. Of all the measures used as criteria in this study, these would appear to represent those skills of greatest importance in communication with the French cultural-linguistic community. This finding is similar to that reported by Gardner (1960). He suggested that the factorial separation of language skills (i.e. those stressed in the school situation vs. those developed outside the school situation) was probably due to the fact that those students had had an average of six years of prior training in French and a considerable opportunity to use their French in the Montreal bilingual setting. Furthermore, he states that integratively oriented students capitalized on this opportunity and
developed their communication skills. The results of the present study suggest that even without prior training (Variable 28) or a definite opportunity to practice French, a desire to better understand French-speaking people will result in increased proficiency in developing French skills involved in communication.

Two further variables receive loadings on Factor IV, namely, disarranged words (Variable 3) and grade five English performance (Variable 11). The pattern is not clear, although it might suggest that certain aspects of English and French language achievement have elements in common. Such an interpretation would be consonant with that proposed in Factor II.

Factor V receives its highest loadings from measures of parent attitudes toward French-speaking people and the study of their language (Variable 36, 29, 37, 35, 34, 27 and 32). The factor is thus labelled a Parent French Attitude factor. The pattern of variables suggests that parents who express positive, accepting attitudes toward French-speaking people encourage their children to study French. One cannot, however, be certain of the basis for this encouragement. On the one hand, when these parents are asked to rate individual 'integrative' or 'instrumental' purposes for the study of French, they tend to be reluctant to endorse either set (Variables 36 and 35), suggesting that reasons other than those included in the questionnaire should be selected. However, when they are forced to choose between the two sets of reasons, they indicate a tendency to support an 'integrative' rather than 'instrumental' approach to French language study.
The loadings of student scores on both the instrumental and integrative rating scales (Variables 21 and 22) suggest that the basic parent orientation tends to become that of the children. That is, integratively-oriented students tend to come from homes where parents have a basic integrative orientation in combination with definite pro-French attitudes. Such parents encourage their children to do well in French (Variable 37). These results tend to confirm the interpretation of the relationship between parent and student attitudes suggested by Gardner (1966). Furthermore, the loading of the French pronunciation knowledge variable (Variable 45) suggests that such parental encouragement and orientation has its effect upon an aspect of French directly involved with communication with the French-speaking people.

Factor VI receives loadings greater than .20 from student attitude measures (Variables 19, 17, 16 and 18), indices of student orientation toward the study of French (Variables 20, 22 and 21), two indices of student facility with English (Variables 10 and 7), and a measure of parental encouragement to study French (Variable 37). The pattern of loadings suggests that this factor is best defined as a Student Ethnocentrism factor similar to that reported by Lambert et al., (1961). The student attitude measures describe a student who tends to be authoritarian, dissatisfied with his role in society and who, when asked to compare English and French-speaking people, consistently chooses in favour of the English. When asked about the French language program as part of the school curriculum, this student feels that he is studying French only for its utilitarian value and is
unwilling to endorse integrative reasons. This type of student appears willing to concede that the inclusion of French in the school curriculum might be beneficial to him in that it possibly might allow him to improve his role or position in society. Although the loadings of the French achievement measures on this factor are low, it is interesting to note that all of the measures of achievement which are stressed in the school situation receive negative loadings, suggesting that Student Ethnocentrism might actually be associated with poor language performance. In the studies reported by Lambert et al., (1961), it was evident that a relationship did exist between various aspects of second-language learning and Student Ethnocentrism, whereas that reported by Gardner (1960) did not. Because of this pattern of community differences, further clarification requires that further studies designed to isolate the bases of these differences be instigated.

The variables receiving the highest loadings on Factor VII include measures of parent attitudes (Variables 33, 31, 32, 30 and 29), parent rating on the instrumental rating scale (Variable 35), and two measures of student attitudes (Variables 17 and 18). The loadings suggest that this factor is best labelled a Parent Ethnocentrism Factor. The configuration appears to describe a parent who tends to be rather authoritarian, biased against French-speaking people, and rather dissatisfied with his role in society. It should be noted that, unlike Student Ethnocentrism as described in Factor VI, Parent Ethnocentrism is directly related to negative attitudes toward French-speaking people. The loadings of variables 17 and 18 on this
factor suggest that in homes where the parents have a definite ethnocentric bias, their teen-age children tend to demonstrate a similar bias. The negative loading of the parent's instrumental rating scale on this factor suggests furthermore that ethnocentric parents are unwilling to ascribe an utilitarian value to the study of French. In this respect, the configuration differs markedly from that described by Factor VI, Student Ethnocentrism. Ethnocentric students rejected integrative reasons and endorsed the instrumental, whereas ethnocentric parents definitely reject instrumental reasons for the inclusion of French in the school curriculum.

The loading of the measure of French grammar knowledge (Variable 43) on Factor VII suggests that Parent Ethnocentrism has an influence upon second-language acquisition, especially in those aspects which are stressed in the school learning situation. That is, students from homes where ethnocentric attitudes prevail tend to have difficulty in mastering French grammar.

Variable 1, Sex, provides the major defining element of Factor VIII, suggesting that this factor reflects Sex Differences. The pattern of variables indicates that the boys in the sample received higher IQ's (Variable 9) and obtained higher scores on the Verbal Reasoning Test (Variable 10). This difference is reflected in somewhat higher general academic average, (Variable 41) and in more fluent French speaking (Variable 47). Furthermore, girls received higher scores on Number Learning (Variable 4) and Paired Associate Learning (Variable 8). They also indicated a somewhat greater desire
to learn French (Variable 23).

The other variables receiving substantial loadings on Factor VIII are measures of parents' orientation toward learning French (Variables 34 and 35). The loadings indicate the same ambiguity in orientation as was evident in Factor V. For girls, parents tend to endorse reasons which stress the utilitarian value of French study yet, when forced to choose between an instrumental and integrative reason for French study, they choose in favour of the integrative reasons. This apparent contradiction may be due to a conflict between immediate and long-range goals. A parent may feel that the immediate goal is to successfully complete the French course. This knowledge of French would then provide the student with a basis through which he could become better able to understand members of the French cultural-linguistic community.
SUMMARY AND CONCLUSIONS

Measures of students' modern language aptitude and French performance, student English knowledge, and the attitudes of both students and their parents toward French-speaking people and the learning of French were obtained from 153 non-repeating grade IX students and their parents. The major findings indicated that Language Aptitude is related to indices of intelligence and is a major determinant of those aspects of French achievement which appear to be stressed in the high school French course. Furthermore, achievement in the first language (i.e., English), as defined by course grades given during the final elementary school years, is related to second-language achievement. This finding suggests that skills learned while mastering the native language transfer to the learning of the second language.

In addition to the relationship between language aptitude and second-language achievement, it was found that a complex of motivational variables, stressing both positive student attitudes toward the specific cultural-linguistic group represented by the language to be learned and a desire on the part of the student to learn the language of that group was found to be related to the mastering of those aspects of second-language achievement which are involved in direct communication with that cultural-linguistic group.
(i.e. speech, comprehension). In addition, a positive relationship was found to exist between parents' ethnocentric attitudes and those of their children.

Finally, it was found that teacher-assigned grades in French reflect not only a knowledge of those second-language skills as they are taught in high school but also a dimension of 'studentship'. That is, those students who do well in French tend to do well in all academic areas.

In addition to the major findings, two other results were obtained. First, parents with positive attitudes toward French-speaking people tend to encourage their children to learn French. Although such encouragement is not directly related to French achievement, it appears to have an indirect effect through an enhancement of student attitudes toward French-speaking people. Second, negative attitudes toward minority groups on the part of students appear to be related to relatively poor second-language performance.

It was further suggested that community differences in ethnocentric attitudes should be investigated more fully to determine the origin of these differences.
REFERENCES


Canadian Achievement Test In French, Department of Educational Research, Ontario College of Education, Toronto, 1961.


APPENDIX "A"
DISARRANGED LETTERS

Instructions. In this test you will be given words in which the letters have been disarranged. For example, in the first sample exercise the letters ebar on the first line can be arranged to spell bear. Notice that the heading ANIMALS tells you what kind of things to look for. The letters odg can be arranged to spell dog, and the letters atc spell cat. Always write your answers in the spaces at the right.

ANIMALS

    ebar  bear
    odg    dog
    atc

Arrange the letters on the lines in the next exercise to spell the names of boys. The first two names have already been written for you. Write the third.

BOY'S NAMES

    lpau  Paul
    rcla  Carl
    honj

Now arrange the letters in the next exercise to spell the names of birds. Go right ahead. Do not wait for any signal.

BIRDS

    uckd
    cowr
    wahk

When the signal is given (not yet) turn the page and work more problems of the same kind.

DO NOT TURN PAGE UNTIL TOLD TO DO SO!
1. **Furniture**

<table>
<thead>
<tr>
<th>Item</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>camerah</td>
<td>wango</td>
</tr>
<tr>
<td>rorkec</td>
<td>ract</td>
</tr>
<tr>
<td>bleat</td>
<td>tuao</td>
</tr>
<tr>
<td>ksde</td>
<td>gygbe</td>
</tr>
<tr>
<td>dreress</td>
<td>elds</td>
</tr>
<tr>
<td>cardboup</td>
<td>legsih</td>
</tr>
<tr>
<td>nicetab</td>
<td>bleiccy</td>
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</table>

2. **Canadian Cities**

<table>
<thead>
<tr>
<th>City</th>
<th>City</th>
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<tbody>
<tr>
<td>canrevvuo</td>
<td>clanerce</td>
</tr>
<tr>
<td>rootton</td>
<td>frincas</td>
</tr>
<tr>
<td>lorneatm</td>
<td>precy</td>
</tr>
<tr>
<td>stonksoon</td>
<td>eamslu</td>
</tr>
<tr>
<td>nigera</td>
<td>watrel</td>
</tr>
<tr>
<td>mootdenn</td>
<td>elisle</td>
</tr>
<tr>
<td>ranisa</td>
<td>salonich</td>
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</tbody>
</table>

3. **Animals**

<table>
<thead>
<tr>
<th>Animal</th>
<th>Animal</th>
</tr>
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<tbody>
<tr>
<td>irgaffe</td>
<td>mabler</td>
</tr>
<tr>
<td>guajar</td>
<td>tseel</td>
</tr>
<tr>
<td>giter</td>
<td>plantes</td>
</tr>
<tr>
<td>rhose</td>
<td>haltspa</td>
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<tr>
<td>omseo</td>
<td>rumble</td>
</tr>
<tr>
<td>bartib</td>
<td>nehigssl</td>
</tr>
<tr>
<td>nobis</td>
<td>atringe</td>
</tr>
</tbody>
</table>

**Go on to next column.**

4. **Vehicles**

<table>
<thead>
<tr>
<th>Vehicle</th>
<th>Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. **Boy's Names**

<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. **Building Materials**

<table>
<thead>
<tr>
<th>Material</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

**Stop here. Wait.**
APPENDIX "B"
Your Name: __________________________________________
Test P-115-B

DISARRANGED WORDS

Instructions. Look at the sample item below:

ments exact re ing quire

Two words, an adjective and a noun, have been broken up and the parts disarranged. You are to rearrange these parts and put the words together properly. In the example above, the original words are exacting requirements.

Here are two more examples. Rearrange the words, then write your answer on the space provided. Go right ahead.

a. enter ment per tain fect

b. i jects cult sub diff

You should have written perfect entertainment and difficult subjects.

The test consists of more problems of the same kind. The answers always consist of two words; one is always an adjective, and the second a noun. Be sure and write the words in the correct order. Work rapidly.

DO NOT TURN THIS PAGE UNTIL TOLD TO DO SO.
1. ding py en hap un
2. eve ci nt ex ting
3. pear an ful ap ce youth
4. ive author pens ess
5. ive pre sight vent fore
6. ment mean state ing less
7. ing able dark notice en
8. if lan icial art guage
9. fish un in ual sel divid
10. cat ten ex edu sive ion
11. come us hil dy ario
12. ion cup sent at pre oc
13. develop ous -s danger ment
14. phone mis ed micro treat
15. ance ward ap awk pear
16. ty al ment certain un
17. ir break place age re able
18. nounce press pro ex ion able
19. in ir ible duce resist ment
20. ion north direct ly er west
21. writ hand leg it ing ible
22. ic furnish -s modern ing ist
23. bat bitter er de em ed
24. ity surd ration ir ab al
25. ment ized part de organ re
APPENDIX "C"
APPENDIX "C"

The Student Questionnaire is contained in APPENDIX C. The following is a code listing the various scales and their position in the questionnaire. The code represents the scale and the number of the item within that scale.

FRENCH ATTITUDE SCALE - S

A4, A7, A11, A13, A17, A20, C1, C5, C10, C13, C17, C19, F1, F4, F7, F9, F11, F12, F18, F21

ANOMIE SCALE - S

A2, A6, A12, A15, C3, C8, C12, C15, C20, F3, F14

E - SCALE - S

A3, A9, C2, C9, F2, F10, F17

CULTURAL ALLEGIANCE SCALE - S

A5, A10, A14, A19, C6, C11, C16, F6, F16

CALIFORNIA F - SCALE - S

A1, A8, A16, A18, C4, C7, C14, C18, F5, F8, F13, F19, F20, F22

ORIENTATION INDEX - S

B1 - B5

INSTRUMENTAL RATING - S

E1, E3, E5, E7

INTEGRATIVE RATING - S

E2, E4, E6, E8

DESIRE TO LEARN FRENCH SCALE - S

G1 - G9

MOTIVATIONAL INTENSITY SCALE - S

H1 - H7
PARENTAL ENCOURAGEMENT TO LEARN FRENCH SCALE - S

11 - 16

ATTITUDE TOWARD LEARNING FOREIGN LANGUAGES SCALE - S

J1 - J7
INFORMATION SHEET

Name: ____________________________________  Sex: M — F —

Home Address: ____________________________________________

Birth Date: ___________________________  Age: ________

Grade 8 public school attended: _______________________________________

How many languages can you speak? _______________________________________
    Which ones: ____________________________________________
    ____________________________________________
    ____________________________________________

How many languages can you understand? _________________________________
    Which ones? ____________________________________________
    ____________________________________________
    ____________________________________________

How many languages do you write? ______________________________________
    Which ones? ____________________________________________
    ____________________________________________
    ____________________________________________

How many languages can you read? _____________________________________
    Which ones? ____________________________________________
    ____________________________________________
    ____________________________________________
SCALE "A"

The following statements 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 by writing on the line preceding each statement the number from the following scale which best describes your feelings:

+1 slight support, agreement
+2 moderate support, agreement
+3 strong support, agreement

-1 slight opposition, disagreement
-2 moderate opposition, disagreement
-3 strong opposition, disagreement

1. Obedience and respect for authority are the most important virtues children should learn.

2. In Canada today, public officials aren't really very interested in the problems of the average man.

3. The worst danger to real Canadians during the last 50 years has come from foreign ideas and agitators.

4. The French who have moved to this country have made a great contribution to the richness of our society.

5. Compared to French-speaking people, Canadians are more sincere and honest.

6. Our country is by far the best country in which to live.

7. The more I get to know French-speaking people, the more I want to be able to speak their language.

8. What youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.

9. 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.

10. Family life is more important to Canadians than it is to the French-speaking.

11. French-speaking people are very democratic in their politics and philosophy.

12. The state of the world being what it is, it is very difficult for the student to plan for his career.
13. French-speaking people have produced outstanding artists and writers.

14. Canadian children are better mannered than French-speaking children are.

15. In spite of what some people say, the lot of the average man is getting worse, not better.

16. 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.

17. By bringing the old French folways to our society, they have contributed greatly to our way of life.

18. 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.

19. Canadians appreciate and understand the arts better than do most people in France.

20. French-speaking people's undying faith in their religious beliefs is a positive force in this modern world.
SCALE "B"

Following is a statement with four possible answers given. You are asked to read the statement and then rank the alternatives from "1" to "4" as they refer to you. Mark "1" for the alternative most applicable to you, "2" for the next most applicable, and so on.

It may be that you have some reason which has not been included among the alternatives. Item "e" is therefore left blank to allow you to include your own personal reason. Insert your reason in the space provided and include it anywhere in the ranking that you think it belongs. If item "e" is included, the ranks will, of course, run from "1" to "5".

If two alternatives appear to be equal, give them the same ranking.

I AM STUDYING FRENCH BECAUSE:

___ a) I think it will someday be useful in getting a good job.

___ b) I think it will help me to better understand the French-speaking people and their way of life.

___ c) It will allow me to meet and converse with more and varied people.

___ d) A knowledge of two languages will make me a better educated person.

___ e) Any other personal reason (please explain).

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________
SCALE "C"

The following statements 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 by writing on the line preceding each statement the number from the following scale which best describes your feelings:

+1 slight support, agreement -1 slight opposition, disagreement
+2 moderate support, agreement -2 moderate opposition, disagreement
+3 strong support, agreement -3 strong opposition, disagreement

1. The French-speaking person has every reason to be proud of his race and his traditions.

2. Certain people who refuse to salute the flag should be forced to conform to such a patriotic action, or else be imprisoned.

3. These days, a person doesn't really know whom he can count on.

4. No weakness or difficulty can hold us back if we have enough will power.

5. If Canada should lose the influence of French-speaking people, it would indeed be a deep loss.

6. Compared to Canadians, the French are a very unimaginative people.

7. Human nature being what it is, there will always be war and conflict.

8. It is hardly fair to bring children into the world with the way things look for the future.

9. Foreigners are all right in their place, but they carry it too far when they get too familiar with us.

10. French-speaking peoples are much more polite than many Canadians.

11. The French way of life seems crude when compared to ours.

12. No matter how hard I try, I seem to get a "raw deal" in school.

13. We can learn better ways of cooking, serving food, and entertaining from the French-speaking people.

14. A person who has bad manners, habits, and breeding can hardly expect to get along with different people.
15. The opportunities offered young people today are far greater than they have ever been.

16. The French would benefit greatly if they adopted many aspects of the Canadian culture.

17. French-speaking people are very dependable.

18. People can be divided into two distinct classes: the weak and the strong.

19. Canadian children can learn much of value by associating with French-speaking playmates.

20. Having lived this long in this culture, I'd be happier living in some other country now.
SCALE "E"

Below are eight reasons which might be given for studying French. Please read each reason carefully and rate it, indicating the extent to which it is descriptive of your own case. Circle the letter in front of the answer that best represents your feeling.

THE STUDY OF FRENCH CAN BE IMPORTANT TO ME BECAUSE:

1. I need it in order to finish high school.
   a) definitely my feeling
   b) pretty much my feeling
   c) slightly my feeling
   d) not very much my feeling
   e) definitely not my feeling

2. It will enable me to gain good friends more easily among French-speaking people.
   a) pretty much my feeling
   b) slightly my feeling
   c) not very much my feeling
   d) definitely my feeling
   e) definitely not my feeling

3. One needs a good knowledge of at least one foreign language to merit social recognition.
   a) definitely not my feeling
   b) not very much my feeling
   c) slightly my feeling
   d) definitely my feeling
   e) pretty much my feeling

4. It will help me to understand better the French-speaking people and their way of life.
   a) definitely not my feeling
   b) not very much my feeling
   c) slightly my feeling
   d) pretty much my feeling
   e) definitely my feeling

5. I think it will some day be useful in getting a good job.
   a) slightly my feeling
   b) definitely not my feeling
   c) pretty much my feeling
   d) not very much my feeling
   e) definitely my feeling
Scale "E" - Continued

6. It will allow me to meet and converse with more and varied people.
   a) definitely my feeling
   b) pretty much my feeling
   c) slightly my feeling
   d) not very much my feeling
   e) definitely not my feeling

7. I feel that no one is really educated unless he is fluent in French.
   a) definitely not my feeling
   b) not very much my feeling
   c) slightly my feeling
   d) pretty much my feeling
   e) definitely my feeling

8. It should enable me to think and behave as do the French-speaking people.
   a) pretty much my feeling
   b) slightly my feeling
   c) not very much my feeling
   d) definitely my feeling
   e) definitely not my feeling
The following statements 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 by writing on the line preceding each statement the number from the following scale which best describes your feelings:

+1 slight support, agreement  -1 slight opposition, disagreement
+2 moderate support, agreement  -2 moderate opposition, disagreement
+3 strong support, agreement  -3 strong opposition, disagreement

1. French-speaking people set a good example for us by their family life.

2. Canada may not be perfect, but the Canadian way has brought us about as close as human beings can get to a perfect society.

3. In this country, it's whom you know, not what you know, that makes for success.

4. French-speaking people are generous and hospitable to strangers.

5. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.

6. People are much happier in France than they are here.

7. Canadians should make a greater effort to meet more French-speaking people.

8. The true Canadian way of life is disappearing so fast that force may be necessary to preserve it.

9. It is wrong to try to force the French-speaking person to become completely Canadian in his habits.

10. It is only natural and right for each person to think that his family is better than any other.

11. If I had my way, I would rather live in France than in this country.

12. London would be a much better city if more French-speaking people would move here.

13. Nowadays more and more people are prying into matters that should remain personal and private.
14. The big trouble with our country is that it relies, for the most part, on the law of the jungle: "get him before he gets you".

15. French-speaking people are generally more friendly, sincere, and likeable than any other group of people.

16. The opportunities offered young people in Canada are far greater than in France.

17. The best guarantee of our national security is for Canada to get the secret of the nuclear bomb.

18. The French-speaking people show great understanding in the way they adjust to the Canadian way of life.

19. If people would talk less and work more, everybody would be better off.

20. Sometimes I can't see much sense in putting so much time into education and learning.

21. In general, Canadian industry tends to benefit from the employment of French-speaking people.

22. Most people don't realize how much our lives are controlled by plots hatched in secret places.
1. Place a check mark anywhere along the line below to indicate how much you like French compared to all your other courses.

French is my least preferred course. __:__:__:__:__:__:

French is my most preferred course.

2. When you have an assignment to do in French, do you:
   
   — a) do it immediately when you start your homework
   — b) become completely bored
   — c) put it off until all your other homework is finished
   — d) none of these (Explain)

3. During French classes, I

   — a) have a tendency to daydream about other things
   — b) become completely bored
   — c) have to force myself to keep listening to the teacher
   — d) become wholly absorbed in the subject matter

4. If I had the opportunity and knew enough French, I would read French newspapers and magazines:

   — a) as often as I could
   — b) fairly regularly
   — c) probably not very often
   — d) never

5. After I have been studying French for a short time, I find that I:

   — a) have a tendency to think about other things
   — b) am interested enough to get the assignment done
   — c) become very interested in what I am studying
Scale "G" - Continued

6. If I had the opportunity to change the way French is taught in our school, I would:

   — a) keep the amount of training as it is
   — b) increase the amount of training required for each student
   — c) decrease the amount of training required for each student

7. I believe French should be:

   — a) omitted from the school curriculum
   — b) taught only to those students who wish to study it
   — c) taught to all high school students

8. I find studying French;

   — a) very interesting
   — b) no more interesting than most subjects
   — c) not interesting at all

9. In my French class, I:

   — a) am generally not prepared unless I know the teacher will ask for the assignments
   — b) am always prepared for each lecture having done my assignments or read the material we are to cover
   — c) am sometimes prepared for the lecture, but mostly not
   — d) none of these (Explain) ______________________________

   ______________________________
   ______________________________
SCALE "H"

Read each of the statements below and for each one place a check mark (✓) to the left of the alternative which seems to best describe you. Your answers will not be seen by any of the school authorities, so please try to be as accurate as possible.

1. Compared to the other students in my French class, I think I:
   —— a) do less studying than most of them
   —— b) study about as much as most of them
   —— c) study more than most of them

2. If French were not taught in high school, I would:
   —— a) not bother learning French at all
   —— b) try to obtain lessons in French somewhere else
   —— c) pick up French in everyday situations (i.e., read French books and newspapers, try to speak it whenever possible, etc......)
   —— d) none of these (Explain) ————————————————————

3. I actively think about what I have learned in my French classes:
   —— a) hardly ever
   —— b) once in a while
   —— c) very frequently

4. On the average, I spend about the following amount of time doing home study in French (include all French homework):
   —— a) one hour per week
   —— b) four hours per week
   —— c) seven hours per week
   —— d) none of these (Give approximate number of hours per week: ———— hours).
5. Considering how I study French, I can honestly say that I:
   ——— a) will pass on the basis of sheer luck or intelligence because I do very little work
   ——— b) really try to learn French
   ——— c) do just enough work to get along
   ——— d) none of these (Explain)

6. After I finish high school, I will probably:
   ——— a) try to use my French as much as possible
   ——— b) make no attempt to remember the French I have learned
   ——— c) continue to improve my French (e.g., daily practice, night school, etc.)
   ——— d) none of these (Explain)

7. Compared to my other high school courses, I:
   ——— a) do less work in French than any other course
   ——— b) work harder on French than any other course
   ——— c) do about as much work in French as I do in any other course
1. My parents encourage me to study French.
   very definitely ___:___:___:___:___:___:___: very definitely
   YES
   NO

2. My parents think that there are more important things to study in school than French.
   very definitely ___:___:___:___:___:___:___: very definitely
   YES
   NO

3. My parents have stressed the importance that French will have for me when I leave high school
   very definitely ___:___:___:___:___:___:___: very definitely
   YES
   NO

4. My parents feel that studying French is a waste of time.
   very definitely ___:___:___:___:___:___:___: very definitely
   YES
   NO

5. Whenever I have homework in French, my parents make sure I do it.
   very definitely ___:___:___:___:___:___:___: very definitely
   YES
   NO

6. My parents feel that I should really try to learn French.
   very definitely ___:___:___:___:___:___:___: very definitely
   YES
   NO
SCALE "J"

1. I would study a foreign language in school even if it were not required.
   a) definitely
   b) probably
   c) possibly
   d) probably not
   e) definitely not

2. I would enjoy going to see foreign films in the original language.
   a) some
   b) not much
   c) quite a bit
   d) not at all
   e) a great deal

3. Our lack of knowledge of foreign languages accounts for many of our political difficulties abroad.
   a) strongly disagree
   b) disagree
   c) doubtful
   d) agree
   e) strongly agree

4. I want to read the literature of a foreign language in the original.
   a) strongly agree
   b) doubtful
   c) agree
   d) strongly disagree
   e) disagree
5. I wish I could speak another language perfectly.
   a) a great deal
   b) quite a bit
   c) some
   d) not much
   e) not at all

6. If I planned to stay in another country, I would make a great effort to learn the language even though I could get along in English.
   a) definitely not
   b) probably not
   c) possibly
   d) probably
   e) definitely

7. Even though Canada is relatively far from countries speaking other languages, it is important for Canadians to learn foreign languages.
   a) strongly agree
   b) doubtful
   c) agree
   d) disagree
   e) strongly disagree
APPENDIX "D"
STUDY HABITS QUESTIONNAIRE

NAME: _________________________ MALE: ___ FEMALE: ___

1. Whether I like a course or not, I still work hard to make a good grade.
   a) rarely
   b) sometimes
   c) frequently
   d) generally
   e) almost always

2. I lose interest in my studies after the first few days or weeks.
   a) almost always
   b) mostly
   c) frequently
   d) sometimes
   e) rarely

3. I memorize grammatical rules, definitions of technical terms, formulas, etc., without really understanding them.
   a) almost always
   b) mostly
   c) frequently
   d) generally
   e) rarely

4. When I get behind in my school work for some unavoidable reason, I make up back assignments without prompting from the teacher.
   a) rarely
   b) sometimes
   c) frequently
   d) generally
   e) almost always

5. Daydreaming about dates, future plans etc., distracts my attention from my lesson while I am studying.
   a) almost always
   b) mostly
   c) frequently
   d) sometimes
   e) rarely
STUDY HABITS QUESTIONNAIRE (Cont'd)

6. Even though an assignment is dull and boring, I stick to it until it is completed.
   a) rarely
   b) sometimes
   c) frequently
   d) generally
   e) almost always

7. I keep all the notes for each subject together, carefully arranging them in some logical order.
   a) rarely
   b) sometimes
   c) frequently
   d) generally
   e) almost always

8. When I am having difficulty with my school work, I try to talk over the trouble with the teacher.
   a) rarely
   b) sometimes
   c) frequently
   d) generally
   e) almost always

9. I keep my place of study business-like and cleared of unnecessary or distracting items such as pictures, letters, etc.
   a) rarely
   b) sometimes
   c) frequently
   d) generally
   e) almost always

10. It takes a long time for me to get warmed up to the task of studying.
    a) almost always
    b) mostly
    c) frequently
    d) sometimes
    e) rarely
STUDY HABITS QUESTIONNAIRE (Cont'd)

11. When I sit down to study, I find myself too tired, bored, or sleepy to study efficiently.
   a) almost always  
   b) mostly  
   c) frequently  
   d) sometimes  
   e) rarely  

12. Prolonged reading or study gives me a headache.
   a) almost always  
   b) mostly  
   c) frequently  
   d) sometimes  
   e) rarely  

13. After reading several pages of an assignment, I am unable to recall what I have just read.
   a) almost always  
   b) mostly  
   c) frequently  
   d) sometimes  
   e) rarely  

14. I waste too much time "chewing the fat," reading magazines, listening to the radio, going to the movies, etc., for the good of my studies.
   a) almost always  
   b) mostly  
   c) frequently  
   d) sometimes  
   e) rarely  

15. My studying is done in a random, unplanned manner, and is impelled mostly by the demands of approaching classes.
   a) almost always  
   b) mostly  
   c) frequently  
   d) sometimes  
   e) rarely
STUDY HABITS QUESTIONNAIRE (Cont'd)

16. I utilize the vacant hours between classes for studying so as to reduce the evening's work.
   a) rarely
   b) sometimes
   c) frequently
   d) generally
   e) almost always

17. I am on time with written assignments.
   a) rarely
   b) sometimes
   c) frequently
   d) generally
   e) almost always

18. I like to have the radio playing while I am doing my homework.
   a) almost always
   b) mostly
   c) frequently
   d) sometimes
   e) rarely

19. When reading a long assignment, I stop periodically and mentally review the main facts and ideas that have been presented.
   a) rarely
   b) sometimes
   c) frequently
   d) generally
   e) almost always

20. I seem to accomplish very little in relation to the amount of time I spend studying.
   a) almost always
   b) mostly
   c) frequently
   d) sometimes
   e) rarely
STUDY HABITS QUESTIONNAIRE (Cont'd)

21. I prefer to sit in the back of the classroom.
   a) almost always
   b) mostly
   c) frequently
   d) sometimes
   e) rarely

22. With me, studying is a hit-or-miss proposition, depending on the mood I'm in.
   a) almost always
   b) mostly
   c) frequently
   d) sometimes
   e) rarely

23. I study three or more hours per day outside of class.
   a) rarely
   b) sometimes
   c) frequently
   d) generally
   e) almost always

24. Before each study period I set up a goal as to how much material I will cover.
   a) rarely
   b) sometimes
   c) frequently
   d) generally
   e) almost always

25. I keep my assignments up to date by doing my work regularly from day to day.
   a) rarely
   b) sometimes
   c) frequently
   d) generally
   e) almost always
APPENDIX "E"
APPENDIX "E"

The parent questionnaire is contained in APPENDIX E. The following is a code listing the various scales and their position in the questionnaire. The code represents the scale and the number of the item within that scale. The covering letter, written by the school principal, is included.

FRENCH ATTITUDE SCALE - P
A4, A7, A10, A12, A16, A19, C1, C5, C9, C12, C16, C18, E1, E4, E7, E9, E12, E15, E17, E20

ANOMIE SCALE - P
A2, A6, A11, A14, C3, C8, C11, C14, C19, E3, E14, E19

E - SCALE - P
A3, C2, E2, E10

CULTURAL ALLEGIANCE SCALE - P
A5, A9, A13, A18, C6, C10, C15, E6, E11, E16

CALIFORNIA F - SCALE - P
A1, A8, A15, A17, C4, C7, C13, C17, E5, E8, E13, E18, E21

ORIENTATION INDEX - P
B1 - B5

INSTRUMENTAL RATING - P
D1, D3, D5, D7

INTEGRATIVE RATING - P
D2, D4, D6, D8

PARENTAL ENCOURAGEMENT TO LEARN FRENCH - P
F1, F3, F5, F7, F9, F11

PERCEIVED STUDY HABITS - P
F2, F4, F6, F8, F10, F12, F13, F14, F15
Dear Parent:

Recently a study, which was concerned with assessing students' knowledge of French as well as their views about the usefulness of studying it, was conducted in the school which your child attends. This is only one of many projects which have been conducted to determine the adequacy of "second-language" training and the interest students have in learning a language. In some cases, the second language involved in such studies has concerned English and non-English-speaking people.

You are being asked to aid in this study by completing the enclosed questionnaire which deals with your opinions regarding the value French might have for your child. The questionnaire has been designed so that it can be answered quickly and easily, generally by underlining the alternative which best expresses your own views. We realize that using such a format often presents difficulties because people sometimes wish to make comments about some question, or explain more fully their answers. Consequently, we have left a space at the end of the questionnaire so that you might add these comments. We would be grateful to you for any comments you might have since it would aid our understanding; however, it is not necessary for you to fill in that space if you do not wish.

In order to promote uniformity in the questionnaire answers, we would appreciate it if the child's father would complete the questionnaire expressing his own opinions; however, if this is not possible we would appreciate the mother's views.

Please return the completed questionnaire at your earliest convenience in the enclosed envelope.

Yours sincerely,

R. T. Macaulay,
Principal.

This questionnaire was completed by: FATHER ____ MOTHER ____
SCALE "A"

The following statements 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 by writing on the line preceding each statement the number from the following scale which best describes your feelings:

+1 slight support, agreement  -1 slight opposition, disagreement
+2 moderate support, agreement  -2 moderate opposition, disagreement
+3 strong support, agreement  -3 strong opposition, disagreement

1. Obedience and respect for authority are the most important virtues children should learn.

2. In Canada today, public officials aren't really very interested in the problems of the average man.

3. The worst danger to real Canadians during the last 50 years has come from foreign ideas and agitators.

4. The French who have moved to this country have made a great contribution to the richness of our society.

5. Compared to French-speaking people, other Canadians are more sincere and honest.

6. Our country is by far the best country in which to live.

7. The more I get to know French-speaking people, the more I want to be able to speak their language.

8. What youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.

9. Family life is less important to French-speaking people than it is to other Canadians.

10. French-speaking people are very democratic in their politics and philosophy.

11. The state of the world being what it is, it is very difficult for the student to plan for his career.

12. French-speaking people have produced outstanding artists and writers.
13. Canadian children are better mannered than French-speaking children are.

14. In spite of what some people say, the lot of the average man is getting worse, not better.

15. 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.

16. By bringing the old French folkways to our society, they have contributed greatly to our way of life.

17. 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.

18. Canadians appreciate and understand the arts better than do most people in France.

19. French-speaking people's undying faith in their religious beliefs is a positive force in this modern world.
SCALE "B"

Following is a statement with four possible answers given. You are asked to read the statement and then rank the alternatives from "1" to "4" as they refer to you. Mark "1" for the alternative most applicable to you, "2" for the next most applicable, and so on.

It may be that you have some reason which has not been included among the alternatives. Item "e" is therefore left blank to allow you to include your own personal reason. Insert your reason in the space provided and include it anywhere in the ranking that you think it belongs. If item "e" is included, the ranks will, of course, run from "1" to "5".

If two alternatives appear to be equal, give them the same ranking.

MY CHILD SHOULD STUDY FRENCH BECAUSE:

--- a) I think it will someday be useful in getting a good job.

--- b) I think it will help him (her) to better understand the French-speaking people and their way of life.

--- c) It will allow him (her) to meet and converse with more and varied people.

--- d) A knowledge of two languages will make him (her) a better educated person.

--- e) Any other personal reason (please explain).

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________
SCALE "C"

The following statements 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 by writing on the line preceding each statement the number from the following scale which best describes your feelings:

+1 slight support, agreement  -1 slight opposition, disagreement
+2 moderate support, agreement  -2 moderate opposition, disagreement
+3 strong support, agreement  -3 strong opposition, disagreement

1. The French-speaking person has every reason to be proud of his race and his traditions.

2. Certain people who refuse to salute the flag should be forced to conform to such a patriotic action, or else be imprisoned.

3. These days, a person doesn't really know whom he can count on.

4. No weakness or difficulty can hold us back if we have enough will power.

5. If Canada should lose the influence of French-speaking people, it would indeed be a deep loss.

6. Compared to other Canadians, the French are a very unimaginative people.

7. Human nature being what it is, there will always be war and conflict.

8. It is hardly fair to bring children into the world with the way things look for the future.

9. French-speaking people are much more polite than many Canadians.

10. The French way of life seems crude when compared to ours.

11. No matter how hard I try, I seem to get a "raw deal" in my work.

12. We can learn better ways of cooking, serving food, and entertaining from the French-speaking people.

13. A person who has bad manners, habits, and breeding can hardly expect to get along with different people.

14. The opportunities offered young people today are far greater than they have ever been.
15. The French would benefit greatly if they adopted many aspects of the Canadian culture.

16. French-speaking people are very dependable.

17. People can be divided into two distinct classes: the weak and the strong.

18. Canadian children can learn much of value by associating with French-speaking playmates.

19. Having lived this long in this culture, I'd be happier living in some other country now.
SCALE "D"

Below are eight reasons which might be given for studying French. Please read each reason carefully and rate it, indicating the extent to which it is descriptive of your own case. Circle the letter in front of the answer that best represents your feeling.

THE STUDY OF FRENCH CAN BE IMPORTANT TO MY CHILD BECAUSE HE (SHE)

(1) Needs it in order to finish high school.
   a) definitely my feeling
   b) pretty much my feeling
   c) slightly my feeling
   d) not very much my feeling
   e) definitely not my feeling

(2) Will be able to gain good friends more easily among French-speaking people.
   a) definitely my feeling
   b) pretty much my feeling
   c) slightly my feeling
   d) not very much my feeling
   e) definitely not my feeling

(3) Needs a good knowledge of French to merit social recognition.
   a) definitely my feeling
   b) pretty much my feeling
   c) slightly my feeling
   d) not very much my feeling
   e) definitely not my feeling

(4) Will better understand French-speaking people and their way of life.
   a) definitely my feeling
   b) pretty much my feeling
   c) slightly my feeling
   d) not very much my feeling
   e) definitely not my feeling

(5) Will need it to get a job.
   a) definitely my feeling
   b) pretty much my feeling
   c) slightly my feeling
   d) not very much my feeling
   e) definitely not my feeling
(6) Will be able to meet and converse with more and varied people.
   a) definitely my feeling
   b) pretty much my feeling
   c) slightly my feeling
   d) not very much my feeling
   e) definitely not my feeling

(7) Will not be really educated unless he (she) is fluent in French.
   a) definitely my feeling
   b) pretty much my feeling
   c) slightly my feeling
   d) not very much my feeling
   e) definitely not my feeling

(8) It should enable him (her) to think and behave as do French-speaking people.
   a) definitely my feeling
   b) pretty much my feeling
   c) slightly my feeling
   d) not very much my feeling
   e) definitely not my feeling
The following statements 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 by writing on the line preceding each statement the number from the following scale which best describes your feelings:

+1 slight support, agreement  -1 slight opposition, disagreement
+2 moderate support, agreement -2 moderate opposition, disagreement
+3 strong support, agreement -3 strong opposition, disagreement

1. French-speaking people set a good example for us by their family life.

2. Canada may not be perfect, but the Canadian way has brought us about as close as human beings can get to a perfect society.

3. In this country, it's whom you know, not what you know, that makes for success.

4. French-speaking people are generous and hospitable to strangers.

5. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.

6. People are much happier in France than they are here.

7. Canadians should make a greater effort to meet more French-speaking people.

8. The true Canadian way of life is disappearing so fast that force may be necessary to preserve it.

9. It is wrong to try to force the French-speaking person to become completely Canadian in his habits.

10. It is only natural and right for each person to think that his family is better than any other.

11. If I had my way, I would rather live in France than in this country.

12. London would be a much better city if more French-speaking people would move here.

13. Nowadays more and more people are prying into matters that should remain personal and private.
14. The big trouble with our country is that it relies, for the most part, on the law of the jungle: "get him before he gets you".

15. French-speaking people are generally more friendly, sincere, and likeable than any other group of people.

16. The opportunities offered young people in Canada are far greater than in France.

17. The French-speaking people show great understanding in the way they adjust to the way of life of other Canadians.

18. If people would talk less and work more, everybody would be better off.

19. Sometimes I can't see much sense in putting so much time into education and learning.

20. In general, Canadian industry tends to benefit from the employment of French-speaking people.

21. Most people don't realize how much our lives are controlled by plots hatched in secret places.
1. We, as parents, encourage our child to study French.

<table>
<thead>
<tr>
<th>Very Definitely</th>
<th>YES</th>
<th>No</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
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</table>

2. We feel that our child wastes too much time "chewing the fat", reading magazines, listening to the radio, watching TV, etc. for the good of studies.

<table>
<thead>
<tr>
<th>Very Definitely</th>
<th>YES</th>
<th>No</th>
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<tbody>
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3. We think that there are more important things to study in school than French.

<table>
<thead>
<tr>
<th>Very Definitely</th>
<th>YES</th>
<th>No</th>
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<tbody>
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</table>

4. Our child likes to have the radio playing while he (she) is doing his (her) homework.

<table>
<thead>
<tr>
<th>Very Definitely</th>
<th>YES</th>
<th>No</th>
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5. We have stressed the importance that French will have for our child when he (she) leaves high school.

<table>
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<tr>
<th>Very Definitely</th>
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</table>

6. Our child seems to accomplish very little in relation to the amount of time he (she) spends studying.

<table>
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<tr>
<th>Very Definitely</th>
<th>YES</th>
<th>No</th>
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7. We feel that studying French is a waste of time.

<table>
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<tr>
<th>Very Definitely</th>
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<tbody>
<tr>
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</table>
8. With our child, studying is a hit-or-miss proposition, depending upon his (her) mood.

Very Definitely  
YES  

No

9. When our child has homework in French, we make sure he (she) does it.

Very Definitely  
YES  

No

10. Our child is easily distracted when he (she) is studying.

Very Definitely  
YES  

No

11. We feel that our child should really try to learn French.

Very Definitely  
YES  

No

12. Our child keeps his (her) assignments up to date by working regularly from day to day.

Very Definitely  
YES  

No

13. When our child has difficulties with school work, he (she) tries to talk over the trouble with the teacher.

Very Definitely  
YES  

No

14. Even though an assignment is dull and boring, our child sticks to it until it is completed.

Very Definitely  
YES  

No

15. It takes a long time for our child to get warmed up to the task of studying.

Very Definitely  
YES  

No
READING INSTRUCTIONS

SAY:

I am going to give you a passage of French prose, which you are to study for 2 minutes. At the end of that time, I will ask you to read it aloud into this tape recorder. Please prepare yourself to read the passage as clearly and correctly as possible. Are there any questions?

(At the end of 2 minutes SAY).

Please begin by stating your name and school. Then read the passage.
Comme tous les pays du monde, la France célèbre certaines fêtes. Plusieurs ressemblent à celles du Canada : par exemple, en novembre, la fête nationale et les grandes fêtes religieuses de Noël, du jour de l'An et de Paques.

A Paris, en novembre, on dépose des fleurs sur le tombeau du Soldat inconnu. Il y a un moment de silence. Au Canada, ce jour-là, on dépose des fleurs sur les monuments aux soldats morts dans les deux guerres mondiales, et à onze heures il y a aussi un moment de silence ; pendant deux minutes personne ne parle.
APPENDIX "G"
FRENCH FREE SPEECH INSTRUCTIONS

SAY:

On this card, you can see the phrase "Chaque matin", which means "Every morning". In a few minutes, I am going to ask you to give me, aloud, 4 or 5 French sentences suggested by this phrase. Your talk will be tape-recorded.

For example, if you were asked to do this in English, you might say "Every morning, I get up, at 7:30 A.M. After dressing myself, I eat breakfast which usually consists of a glass of juice, bacon and eggs and toast. After breakfast, my father goes to work at the office, whereas I go to school."

Are there any questions? You will now receive 2 minutes to think about what you will say.

(At the end of 2 minutes SAY).

Please begin by stating your name and school. Then give your talk beginning with "Chaque matin".
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<th>Name of Variable</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
<th>VIII</th>
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