

SOCIAL FACTORS
IN SECOND-LANGUAGE ACQUISITION

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INTRODUCTION

Second-language learning has been studied almost exclusively by educational psychologists who are typically more concerned with prognosis testing (i.e., with predicting who will be successful in the acquisition of a foreign language) than in developing a theory to explain language acquisition. The academic psychologist, on the other hand, while offering many theoretical explanations concerning the language-learning process, rarely has at his disposal empirical data which are relevant to his theories. The purpose of the present study is to integrate both the educational and academic approaches in order to improve prognosis testing and to broaden the theoretical explanation of the second-language learning process.

Henmon's 1929 comprehensive review of prognosis testing provides a description of the rationale leading to the development of prognosis tests (12). The assumption that differential success in second-language acquisition depends upon some fundamental language learning aptitude, common then, still appears to underlie much of the research in this area. In the early 1920's, researchers attempted to predict second-language achievement on the basis of such measures as general scholarship ratings, or grades in specific subjects, but as psychological testing developed, attention shifted to the use of prognosis and intelligence tests.

Prognosis tests, such as the "Iowa Foreign Language Aptitude" or the "Symonds' Foreign Language Prognosis" test, measured the student's comprehension of the rules of grammar, his knowledge of English grammar, his ability to translate, and to learn a simple artificial language, etc. Measures of these specific intellectual capacities, it was thought, provided the best index of language aptitude.

The correlation coefficients between measures of second-language achievement and those intelligence tests then in use were generally positive, the coefficients ranging from .20 to .60, with a mean between .30 and .40 (12). Although these are not dependable predictors of success, they do establish a positive relationship between intelligence and language-learning aptitude as measured by tests of achievement in course work. Correlations obtained with the prognosis tests were even more encouraging, sometimes yielding coefficients as high as .71 (18).

Because such substantial correlations had been obtained, Henmon was probably justified in his conclusion that:

"The evidence presented in this summary indicates the special prognosis tests are more effective instruments than general intelligence tests and that these two together with objective measurements in a trial period furnish in the present state of our knowledge, the best bases of prediction and classification." (12, p. 31).

However, in the light of more recent research, it would appear that much of the variance of the so-called "special prognosis tests" could be accounted for by their correlation

with intelligence tests. Thus, Wittenborn and Larsen obtained correlation coefficients comparable to those reported in 1929 (12). When these correlations were factored, however, the validity of the prognosis tests as a measure of pure language-learning ability becomes questionable as shown by the following orthogonally rotated factor matrix:

ROTATED FACTOR MATRIX*

Tests	I	II	III	IV	V	VI
1. Otis Intelligence Test	27	41	19	35	45	-14
Cooperative German Test:						
2. German Reading	78	-06	00	22	09	-36
3. German Vocabulary	83	-07	01	-05	16	-26
4. German Grammar	74	04	17	13	25	12
5. Number Patterns	-01	11	15	14	69	-21
6. Initials Recall	06	09	82	06	09	02
7. Backward Writing	10	07	-04	12	59	-07
8. Test for Attention	11	30	22	42	22	-06
9. Phillip's Alphabet	11	17	-05	15	59	23
10. Auditory Word-Number	-09	-01	61	05	13	-05
11. Auditory Initials Recall	07	00	74	08	21	-05
12. Word Number Recall	-07	07	51	-01	15	07
13. Syllogisms	06	16	20	55	15	-01
14. Test for Attention	19	16	11	62	10	06
15. German Grades	65	03	07	-02	32	01
English Training Tests:						
16. Spelling	56	26	00	-04	39	10
17. Grammar Training	59	33	13	10	32	47
18. Sentence Usage	47	56	-01	01	16	13
Foreign Language Aptitude:						
19. Grammar	45	45	31	30	18	33
20. Esperanto Word Meanings	45	64	03	-02	27	-23
21. Esperanto Principles	09	58	07	27	40	09
22. Translating Esperanto	17	76	10	00	17	-13

*This factor matrix was adapted from Wittenborn, J. R., and Larsen, R. P., A factorial study of achievement in college German, J. educ. Psychol., 1944, 35, 44.

Factors I and II are of relevance to the present argument. The authors labelled Factor I a "language factor" because of the high loadings of the achievement tests in both German (the language being acquired), and English. Factor II has been defined as a "language usage" factor (2), in that tests demanding facility in the use of grammatical and linguistic principles, as well as a standard verbal intelligence test, are substantially loaded on this factor.

Two facts stand out in this factor matrix. First, both the Otis Intelligence Test and the Iowa Foreign Language Aptitude Tests are substantially loaded on Factor II, indicating that they measure essentially the same component -- presumably intellectual capacity. Second, this factor is orthogonal to Factor I, indicating that these tests of language learning aptitude, or intellectual capacity, are independent of tests of second-language achievement.

It would appear, therefore, that the foreign language aptitude tests and the intelligence tests derive their significant correlations with second-language achievement because of their great dependence on achievement in the native language. Thus, although the English achievement tests load substantially on both Factors I and II, the foreign language aptitude and intelligence tests cluster, for the most part, only on Factor II. These data suggest that students who have successfully mastered their own language, and as a result score higher on both intelligence and

foreign language aptitude tests will also tend to be successful in acquiring a second language.

Making the assumption, then, that differential success in acquiring one's own language depends upon some underlying intellectual capacity, an assumption made in the construction of most intelligence tests, we would conclude that prognosis tests prove useful in predicting success in learning a second language because they measure that aspect of intellectual capacity directly relevant to the language learning situation.

This assumption appears to have been made previously by J. B. Carroll in the construction of his own foreign language aptitude test battery. He states:

"....the conventional intelligence test measures such an aggregation of factors of mental ability that any results which might be obtained with such tests could not be readily interpreted. The tests included in the present battery were expected to measure most of those components of 'intelligence' which are relevant to success in learning spoken foreign languages;...." (6, pp. 7-8).

These specific intellectual components, moreover, appear to be best measured through achievement in one's native language. Thus, Carroll states:

"One of the hypotheses about foreign language aptitude... is that an individual's success in handling various aspects of his native language should be at least to some extent predictive of his success in learning a second language." (6, p. 5)

Although skill with one's native language may depend upon some inborn intellectual capacity, it is obvious that these "various aspects of his native language" are specifically learned.

Despite all the research which has been devoted to the reliable measurement of the "language-learning aptitude," prediction of second-language achievement is still far from perfect. In fact, the latest battery of tests developed (2, 4, 5, 6), though much improved over previous tests, produces validity coefficients ranging from .15 to .80 (3). This variability in validity coefficients was considered to be due to the lack of control of such personal characteristics as interest (12, 18, 21), motivations (21), and effort expended (18, 21). It was further suggested that if these variables could be held constant (12, 21), the aptitude tests would probably yield near perfect predictions. However, possibly because of difficulties in quantifying them, these variables appear to have been ignored.¹

The importance of taking into consideration more than one factor related to the successful acquisition of a second language cannot be overstated, especially when such factors are independent. Consider the case where two uncorrelated attributes, X and Y, are equally necessary for

¹One recent study (9) has suggested that the efficiency of predicting success in learning foreign languages is increased when attention is paid to such personality factors as motivation and emotional stability. However, this article is not available at present, and the abstract gives no indication of how these personality factors are determined.

the acquisition of a behavior pattern, B. If X is held constant, Y will be highly correlated with B, and prediction of B, given Y, will be very accurate. However, if X is allowed to vary at the same time Y does, the degree of correlation between Y and B decreases notably, and with it the accuracy of predicting B, given Y.

Therefore, the next step in the improvement of prognosis testing is to systematically measure such motivational variables as "interest" to determine if they actually play an important role in second-language achievement and if they are independent of the aptitude factor which, in isolation, appears to have a limited predictive power. If motivational-type variables are found to have these relationships with achievement and aptitude they should certainly be incorporated into a prognosis test battery.

The term "social factors" will be used here to refer to some of these personal characteristics previously referred to as interest, etc., which might motivate the subject to expend the energy necessary to acquire the verbal symbols of another culture, thus facilitating inter-personal relations. This definition has three main components. First, social factors presumably incorporate both an impetus and direction in the study of languages. Second, it is suggested that the second-language is not only an aggregate of verbal symbols, but an aggregate of the symbols of another culture. Learning word lists and grammatical rules does not, it is argued, constitute acquisition of a second language. To have

learned a second language, one must be able to meaningfully manipulate the words used by another cultural group. Third, the definition states that a knowledge of the language will facilitate interpersonal relations.

This interpretation of second-language learning suggests the possible value of determining the motivational elements in second-language acquisition through measures of attitudinal or "social" factors.

The theoretical formulation of Mowrer (14), with reference to the first language situation, and Ervin's (11) application of a similar thesis to the bilingual, supply a theoretical structure which suggests the importance of social factors.

Mowrer (14) has theorized that the child comes to imitate the verbal symbols of the parent because, in the past, these have been associated with satisfactions (drive reduction) provided by the parent. With time, these symbols presumably become satisfying in their own right. That is, they come to take on secondary reinforcing value. The child then attempts to perfect his reproductions of these word-sounds since the more nearly perfect the reproduction, the more rewarding it is. The resultant tendency to imitate the parents, in their absence, Mowrer calls "identification" (14).

In the case of the second-language learner, Ervin argues:

"Obviously normal adults do not readily surrender their earlier identities, and adult identifications are likely to be partial, involving, in a sense, the acquisition of new roles. In general, we would expect adult identifications in the sense of permanent personality changes to occur under conditions of extreme dependence or stress, such as combat; emotional closeness with another person who is a source of gratification; or difference in social position in its widest sense, when the other person performs a role or occupies a position that is desirable. The desire to be like another person need not be conscious." (11, p. 5)

The concept of "identification" as developed above appears to denote a desire to be like another person. However, identification, as exhibited by tendencies to imitate the behavior patterns characteristic of another cultural group or socio-economic class, has been reported in the literature (13, 15). Some observations have even been made that suggest that this generalized identification, as defined by a genuine interest in (22) or favorable attitude toward the out-group, is a prerequisite for the acquisition of a second language.

The desire to be integrated with another cultural group can, however, be motivated by conditions other than a "liking" for this other group. An individual could choose an out-group as his "reference group" because of dissatisfactions with his membership group. Such an orientation would not involve identification, since the desire for integration could be independent of any emotional satisfactions associated with this group.

It is our hypothesis that this desire for integration motivates many people to study a foreign language, and that it can result from one of two possible causes. While some people have essentially identified with the out-group, and therefore strive for integration, others seek membership in this group because of dissatisfaction with their own in-group. The chief result, nevertheless, is a striving for integration, and to the extent that this motivating condition is important, we speak of an integrative motive necessary in second-language acquisition.

Ervin (11) also suggests that first-language acquisition is not dependent only upon identification. "In addition to the secondary reward experienced in the absence of the model, there are various direct rewards given by others when behavior imitative of adults has occurred," (11, p. 2). That is, the child learns to imitate some word-sounds because of their instrumental value for him.

It can also be hypothesized that second languages can also be learned for instrumental purposes. Obviously, all second-language acquisition does not imply an attempt to become integrated with a new cultural group. Whyte and Holmberg's (22) observations of workers in Latin America who successfully acquire "job Spanish" in order to "get the job done," illustrates an instrumental motivation. In this case, no desire to become integrated appears evident, yet some workers did learn useful aspects of the language. Whyte

and Holmberg's study indicated that workers with instrumental-type motivation were unlikely to acquire more than isolated bits of the language.

Both the "integrative" motive and the "instrumental" motive are components of social factors presumed to be important in second-language acquisition. The first aspect of the "integrative motive" (defined as a desire to gain membership into the other culture group because of satisfactions associated with being like members of that group) should manifest itself in positive scores on a test of attitudes toward the out-group. Similarly, as the California F-Scale (1) is highly correlated with both "ethnocentrism" (a tendency toward suspicion of out-groups) and various measures of prejudice toward specific out-groups (7, 20), individuals who are integratively motivated should score relatively low on this test.

The second component of the integrative motive should manifest itself in a dissatisfaction with one's position or status in his own group. One test which was designed to measure dissatisfaction ("in-group disaffection") is Srole's Anomie Scale (17).²

²The F-Scale and the Anomie Scale have been found to be positively correlated. To the extent that these findings are reliable, any of our differential predictions about authoritarian and anomic individuals become questionable. We are arguing that the authoritarian individual, because of his dogmatic acceptance of the values of the in-group, will be unable to acquire the verbal symbols of another group. The anomic individual, even though possibly authoritarian, may force himself to acquire these new symbols in the hope of improving his position in some other group. To the

Integrative or instrumental motives should be manifested in the reasons given by students for actually studying a second language. A person may be considered integratively motivated if he states that his chief reason for studying French is to gain access to the French-speaking group, either for the purpose of enlarging his circle of acquaintances, or to gain a better understanding of these people. A person may be considered instrumentally motivated if he states that his dominant motive is to learn French in order to benefit himself either financially or in terms of prestige.

Dunkel (10) has suggested that two aspects of motivation are important in second-language acquisition -- the kind of motivation (referring to objectives and purposes), and the intensity. The foregoing analysis has been concerned with the first of these. It was hypothesized that "motivational intensity" could be defined in terms of the effort subjects would expend to improve their knowledge of French. Thus, motivational intensity was presumed greater for those subjects who spent much time doing work (other than assignments) in French, who read French publications, and listened to French radio broadcasts, etc., than for those who merely completed the necessary assignments. It was possible, therefore, to develop a scale to quantify the degree of intensity in these terms.

extent that this dogmatic acceptance of in-group values does not presuppose preference for the in-group, the anomic individual could be both authoritarian and at the same time attempt to move from the confines of his own in-group.

Considerable reference has been made in the foregoing material to an out-group associated with the second language. Insofar as the three studies to be reported deal with French as the second language, it might be argued that "the French" should be considered as that out-group. The situation in Montreal, however, appeared to warrant or even demand a more precise definition of the out-group. Because of the bi-cultural make-up of the city, it seemed more reasonable to label the "French-Canadians" as this cultural out-group, for three reasons. First, the French-Canadian as a "cultural entity" distinct from the English-speaking people appears to have more of an emotional tone associated with it than does the less well defined concept of the French. Second, it was hypothesized that if attitudes toward "the French" were measured in the attitude scales, some subjects might, while others might not, interpret this to mean the French-Canadians. This unintended ambiguity might, it was felt, significantly influence the results in an unpredictable manner. Hence, the more specific and meaningful concept of "French-Canadian" was used to denote the out-group in question. Third, it is presumed that subjects were acquiring French in order to use it primarily in the Quebec scene. To the extent that some subjects are learning French in order to associate with people from France, the association between the attitude scale and successful acquisition of French will, of course, be reduced.

In summary, previous research indicates that an aptitude is important in the acquisition of a second-language (2, 5, 6, 12, 18). The lack of perfect prediction suggests, however, that other factors may also be important (12, 18, 21). The theoretical formulations of Mowrer (14) and Ervin (11), suggested possible "social factors," which might underlie these other variables.

The three studies to follow attempt to show the possible importance of these social factors. As each additional study was designed to improve on the earlier one, both in terms of type of data gathered and controls introduced, no study replicates another. Thus, Study I, using adult English speaking subjects, was designed to try out some standard and original tests of social-motivation, and to survey the effects of these on progress in the study of French. Study II, carried out with senior year high school students, is concerned with the intercorrelation of these social-motivational variables and measures of achievement in both English and French. Finally, Study III, also making use of high school seniors, is a factor analytic study comparing the relative importance of second-language learning aptitude and the social-motivational factors for achievement in French.

STUDY I

Procedure

Permission was granted by McGill's Department of Extension to ask students attending adult evening classes in French if they would be willing to complete a questionnaire to assess the motivations and attitudes of students learning a second language. Although their names were requested, students were assured that questionnaires would be coded and kept anonymous, and that they could refrain from giving their names if this were an important issue for them. It was made clear, however, that their responses on the questionnaire were to be related to their relative achievement in the course.³ For their convenience, the subjects were allowed to take the forms home and return them at the next meeting.

A large proportion of students were absent from most classes and it was not possible to obtain the names of those present. Since a list of all students enrolled in the French classes had been procured earlier, a mailing list comprising those who had not returned a form was drawn up, and copies of the questionnaire were mailed to these people. The return envelopes were coded to permit class by class comparisons. Of the 275 questionnaires distributed, 105 were finally collected, and eight of these destroyed for various reasons. Thus, 97 forms were used in the statistical analysis (Table I).

³Measures of relative achievement were to be determined from ratings made by the class instructors. Because many of the instructors were either unable or reluctant to make these ratings, this aspect of the statistical analysis had to be omitted.

Examination of the description of courses and past class records of the Extension Department indicated that certain groupings of students could be used as criteria for the social-motivational variables, in the place of teachers' ratings of achievement in French which could not be obtained. In the first instance, students differed in level of achievement and were categorized as "beginners" (Classes 1-3, Table I) or "advanced" (classes 4-6, Table I). Second, since the classes stress either of two aims in the study of French, grammar training to facilitate reading and writing, or oral-aural training for those interested in conversation, students were classified as "non-conversationally" oriented or "conversationally" oriented. The first course (No. 1, Table I) was omitted in this analysis since all students with no previous training in French are required to enroll in this class. Apart from this restriction, however, they are free to choose either the conversation (classes 3, 5, and 6, Table I), or non-conversation (classes 2 and 4, Table I) program. Third, students differed in their course attendance which was presumed to reflect interest or persistence in learning French. These classes are characterized by a high proportion of "drop-outs" (i.e., people who withdraw from the course well before the year is completed) who were compared with class "completers."

It was predicted that the integrative motive would be more characteristic of the Advanced Group in that advanced students should be less ethnocentric (i.e., have lower F-Scale scores), have more favorable attitudes toward French-Canadians, and be more anomic than the Beginners.

The conversationally oriented students indicate by their choice of courses that they desire to learn to speak and understand French. To the extent that this orientation reflects a desire to make friends of French-speaking people, they should be more favorably predisposed toward the French-Canadians; to the extent that it reflects a desire to merely move out of the in-group, they should be possibly more anomic.

Those who drop out of courses in French may do so because they find it uncomfortable to learn about and even imitate the verbal behavior of another cultural group. From this point of view, it was predicted that drop-outs would tend to be more ethnocentric and have less favorable attitudes toward French-Canadians than those who complete their courses.

The rationale leading to the development of the tests used in this study has been discussed in the introduction. Description of all the tests, as well as copies of those specifically developed for this study, are included in Appendix B.

Results

Table II lists the results of comparisons between Beginners and Advanced students on the social-motivational tests. The only statistically significant difference was obtained with the F-Scale which shows that the sample of students more advanced in their study of French are reliably less authoritarian than those beginning their study. Whether this difference means that those students who are initially less prejudiced against out-groups are more likely to continue in their study of languages, or that considerable language experience results in a decrease in ethnocentric attitudes, cannot be ascertained from the available data.

In Table III there are no significant differences, but two trends are obvious. The Conversation group tends to exhibit more positive attitudes towards French-Canadians, and at the same time appears to be more anomic. This difference in anomie is not significant ($t = 1.82$; 51 d.f.), however, the possibility that some people are motivated to acquire the conversational aspects of a language as rapidly as possible because they are dissatisfied with their social position deserves more intensive investigation.

- To the extent that the tests used measure motivation to acquire a second language, we must conclude that persistence, measured by course completion, is not related to motivation. None of the differences between the Drop-outs and the Completers in Table IV approach significance. It is

interesting to note, however, that the Drop-outs show more favorable attitudes and less ethnocentrism than do the Completers. These trends might mean that Drop-outs are interacting directly with French-Canadians and acquiring the language in this situation, making class attendance superfluous. It could be, however, that Drop-outs having comparatively more favorable attitudes toward French-Canadians, and being somewhat less ethnocentric, do not find themselves comfortable in the class situations where all instructors are born and trained in France and are likely stressing "standard" in contrast to "Canadian" French.

The table of intercorrelations (Table V) permits some interesting interpretations. Seven of the correlations obtained were significantly different from zero. Those obtained for the total group are similar to many previously reported. The F-Scale is negatively correlated with favorable attitudes towards French-Canadians -- a finding which has often been reported with reference to other out-groups (20). Similarly, the positive relationship reported by Srole (17) between Anomie and F-Scale scores was supported by the present data. A further substantiation of Srole's notion that anomie is related to prejudice toward out-groups in general, is noted in the negative correlation found between Anomie and the French-Attitude Scale.

The positive correlation between F-Scale and Motivational Intensity scores was unexpected. Although low, this correlation may reflect an instrumental orientation to second-language acquisition. That is, ethnocentric individuals might be motivated to learn a language in order to gain some sort of control over the out-group rather than to learn the language in order to get to know people from a different culture.

This trend gains support when the correlations for the Beginners group are considered. The correlation between the French-Attitude Scale and the F-Scale is significantly negative, indicating that a prejudice element is associated with authoritarianism. In contrast, the same two scales are essentially uncorrelated for the Advanced group, indicating that the "prejudice component" of authoritarianism was responsible for the comparatively higher F-Scale scores obtained by the Beginners (see Table II).

The two significantly negative correlations between Anomie and French-Attitude for both the beginning and advanced students can be interpreted in the same way as for the total group. That is, Anomie appears to have a high component of prejudice associated with it. That this prejudice element is found among advanced students of a second language suggests that many potential bilinguals dissatisfied with their membership groups still show unfavorable attitudes towards the group whose language they are learning.

These data increase our confidence that motivation to acquire a second language can be measured by the tests developed here and that the theory underlying their development has promise. The great weakness in this study, however, is the absence of ratings of achievement in French. Study II therefore, was designed to determine the influence of the social-motivational factors on objective measures of achievement in French.

STUDY II

Procedure

The subjects for this study were grade eleven students from two classes of a Montreal high school for boys. Tests were administered to each class separately with the total testing time for each group equalling one hour.

A minimum of information was given to the members of each class. They were told that the experimenter was interested in determining the motivational factors important for learning French, that the data would be meaningful only if they answered the questionnaires as frankly and as accurately as possible, and that none of the school authorities would have an opportunity to see any individual's responses. If a question were embarrassing to them, they were asked to refrain from answering it. Questionnaires were completed by 53 students when seven, whose home language was French, were dropped from consideration.

The tests administered to this group are described in Appendix C. The Anomie Scale was omitted in this study, since it was felt that this concept is not meaningful for teen-age students.

Five other scores for each student were obtained at a later date from the school principal. These included scores on the Otis Intelligence Test, and grades from the following province-wide examinations:

1. French Grammar and Comprehension
2. French Text and Translation
3. English Comprehension
4. English Literature

Results

Table VI is the correlation matrix of all nine measures. The first obvious fact resulting from the matrix is the low intercorrelations of three of the "social factor" scales. Thus, the F-Scale is seen to be uncorrelated with all of the tests in the matrix. Except for its correlation with intelligence and Orientation Index, the French-Attitude Scale is also apparently unrelated to any of the other measures. Orientation Index correlates significantly with English Literature grades, while the Motivational Intensity Scale correlates significantly with both measures of achievement in French. A negative, but insignificant, correlation between Motivational Intensity and intelligence, is surprising. The two measures of achievement in French are highly intercorrelated, and for the most part, both correlate with the intelligence test and the two measures of English achievement. These intercorrelations are comparable with the data obtained by Wittenborn and Larsen (23), suggesting the importance of first language achievement for success in foreign language study.

It did not appear necessary to factor these correlations, as was originally intended. Most of the variance associated with achievement in French is obviously accounted for by English achievement and intelligence test scores.

Because of the low intercorrelations of the social factor scales, it appeared that no factor would obtain high loadings from all these tests.

DISCUSSION OF STUDIES I AND II

Insofar as Study III was developed as a result of the findings from the first two studies, a discussion of these results will be presented before consideration is given to the final study.

In the early stages of this study, it was hypothesized that social-motivational tests would improve prognosis, particularly in those cases where linguistic aptitude tests lacked high validity and that aptitude was not the only factor important in second-language acquisition. The results of Study I partially substantiated this general hypothesis. Advanced students, presumed to be more successful in language acquisition than beginners, were observed to be less authoritarian than beginners, and authoritarianism for the advanced group was uncorrelated with prejudice. Advanced students showed somewhat more favorable attitudes towards French-Canadians. The general interpretation, therefore, was that some motivational element akin to an integrative orientation was operative in second-language achievement.

The over-all positive correlation between Motivational Intensity and F-Scale was the only indication of the operation of an instrumental motive in second-language acquisition. However, this relationship was sufficient to suggest

that instrumental motivation does play a role in second-language learning.

The obvious weakness of the first study was the absence of measures of achievement in the study of French. As a result of the indications suggested above, therefore, Study II was carried out so that objective measures of achievement in French could be obtained. We had no subjects available other than high school students who are required to study French. Although this requirement might impose limitations on the influence of the social factors, it was felt that their influence on achievement could still be shown to exist.

In Study II, Motivational-Intensity was the only test which correlated significantly with the two measures of achievement. The French-Attitude Scale had a very restricted range of scores which could account for its low correlations. It is clear that neither the F-Scale nor the Orientation Index measure correlate with the criteria. There is a significant correlation between Orientation Index and the French-Attitude Scale which suggests that if these tests could be made more reliable they might cluster and, because of the correlation between Motivational-Intensity and the criteria, produce a factor on which the criteria would be substantially loaded. Study III was designed to test this possibility, with improved social-motivational tests. (Compare the tests in Appendix C and Appendix D.)

STUDY III

Procedure

A two hour testing program was carried out in each of four high schools in Montreal. Instructions given to the students stated only that the experimenter planned to relate their scores on a series of tests to their final grades in some school subjects. They were asked to work rapidly and accurately, and to be as frank as possible in stating their opinions where requested. In an attempt to minimize false or "acceptable" opinions, it was requested that responses to items considered embarrassing should be omitted. Prior to commencing the testing session it was impressed on the students that the school authorities would not have access to any individual student's responses to any of the tests.

The data to be reported here deals with the test responses of 75 students from the four schools and includes only non-French speaking students enrolled in the Grade 11 French courses. The group includes 32 girls and 38 boys, all of whom have had approximately six years of formal training in French.⁴ The twelve tests which were administered to these students are described in Appendix D.

⁴Dr. J. B. Carroll, in personal communication, has suggested that this amount of experience should not affect the predictive power of his tests.

Results

Product-moment intercorrelations were computed for twelve of the tests. Intercorrelation of these tests with Variables 13 (Sex) and 14 (Orientation Index) were entered as biserial correlation coefficients, and the correlation of these two dichotomous variables as a phi-coefficient. The correlation matrix is shown in Table VII.

These intercorrelations were factor-analyzed using Thurstone's centroid method (19). Three factors were extracted, producing the factor loadings shown in Table VIII. Orthogonal rotation of these factors involved rotating Axes I and III so as to maximize the projection of Variable 13 (Sex) on Axis III. Rotation of Factors I and II was thus simplified, since two definite clusters were obvious from the plot.

Table IX shows the factor loadings from this orthogonal rotation. Factor I has its highest loadings on Tests 1, 6, 7, 9, 10, and 12. The first of these, 1, is the criterion which indicates that the others definitely measure some component related to achievement in French. Tests 9, 10, and 12 are from Carroll's language aptitude battery, while Tests 6 and 7 are the two subscales from the A.C.E. Factor I, therefore, is best labelled Linguistic Aptitude Factor. Its close resemblance to a Verbal Intelligence Factor should be noted.

Factor II derives its highest loadings from Tests 1, 3, 5, and 14. The last three variables -- attitudes towards French-Canadians, Motivational Intensity, and Orientation Index define Factor II, which is best referred to as a Social-Motivational Factor. Since achievement in French, Test 1, is substantially loaded on Factor II, it is clear that social-motivational variables are important for successful acquisition of French.

The F-Scale is also shown to be moderately loaded on this factor as was originally hypothesized. However, its factorial similarity with Variable 8, Number Learning, is difficult to understand. There is no logical similarity between the two tests and yet they load comparably on all three factors. Further study of both these tests appears necessary.

Factor III obtains its highest loadings from Test 3, 7, and 13 and has been defined as a "sex" factor. The original rotation was made through Variable 13 to minimize its projection on Factors I and II.

GENERAL DISCUSSION

The three studies taken together emphasize the importance of social-motivational variables in second-language learning. To the extent that these are necessary for achievement, they might be considered as aspects of language-learning aptitude, but this term is generally reserved for intellectual-type tests such as those included in Carroll's battery. The argument suggested here is that two components, not one, are important in second-language acquisition, and both should be considered for prognosis. The student who has successfully acquired his native language will profit from foreign language training if he is appropriately motivated. The type of motivation stressed in these studies is of a social or attitudinal nature, and other motivating conditions should be investigated before the integrative-instrumental types are considered as all-inclusive.

Whereas Study I produced evidence for both the integrative and instrumental elements in second-language acquisition, Study II showed no such evidence. Since Study I was carried out with adult subjects, we might conclude that instrumental motivation to learn languages is more characteristic of adults. Study II indicated that Motivational Intensity was the only "social factor" scale correlated with second-language achievement and we were forced to conclude either that our interpretation of the motivating factors in second-language acquisition was not appropriate to high

school students or that our tests were not sensitive enough to measure the relationship. Some low intercorrelations of these tests supported the latter conclusion, and refinement of these tests, in Study III, increased the magnitude of these intercorrelations and improved their predictive power.

The data of Study III substantiate our hypothesis that social-motivational variables are as important in second-language acquisition as linguistic aptitude. In fact, linguistic aptitude and social-motivation are factorially independent, suggesting that inclusion of both aptitude and social-motivational tests in a prognosis battery would greatly improve prediction of achievement. It is obvious from the factor matrix that combining the social-motivational tests with the tests of linguistic aptitude would almost double any multiple correlation coefficient based on the linguistic aptitude tests alone.

The social-motivational tests developed in these studies are specifically relevant for the cultural setting of Quebec and whether they would be directly applicable in other cultural contexts would have to be determined empirically. That languages are acquired in a social setting is axiomatic, and measures of motivation or "interest" must take this social context into consideration.

The value of these studies is not limited to the development of new tests which can be incorporated into prognosis test batteries. They also demonstrate that social-motivational variables can be quantified and are clearly important

in second-language acquisition. The results obtained here increase our confidence in the theoretical orientations underlying the tests developed here, and consequently, the applicability of the theory for other cultural contexts should be tested.

SUMMARY AND CONCLUSIONS

Three studies were carried out to test the hypothesis that social-motivational factors are important in second-language acquisition. In Study I, it was found that advanced adult students studying French were significantly less authoritarian than beginners, and that authoritarianism for the advanced group was uncorrelated with prejudice. Study II indicated that for male high school students, virtually no relationship existed between the social-motivational tests and objective measures of achievement. In Study III, 14 measures obtained on male and female high school students were factor analyzed and two orthogonal factors were found to be related to achievement in French. These were defined as linguistic aptitude (Factor I) and social-motivation (Factor II).

The findings were discussed and an explanation offered for the lack of relationship between the social-motivational tests and achievement in Study II. Two conclusions were drawn:

- a. social-motivation is independent of linguistic aptitude, and
- b. social-motivation and linguistic aptitude are equally important for second-language acquisition.

APPENDIX A

TABLE I
DISTRIBUTION OF SUBJECTS IN THE SIX SUB-GROUPS
Study I

Classes	Total Enroll- ment	Questionnaires Returned		
		Drop- Outs	Comple- tors	Total Returned
1. Beginners (2)*	52	3	11	14
2. Elementary (2)	51	3	11	14
3. Elementary Conversation (3)	57	7	10	17
4. Intermediate (1)	25	2	12	14
5. Intermediate Conversation (2)	43	8	7	15
6. Advanced Conversation (3)	47	3	20	23
TOTAL	275	26	71	97

*Numbers in parentheses refer to the number of classes falling into that classification.

TABLE II
COMPARISONS OF THE MEANS
BEGINNERS AND ADVANCED GROUPS
Study I

Tests	d.f.*	Mean Beginners	Mean Advanced	t	P
F-Scale	68	108.91	95.29	2.05	<.05
French-Attitude Scale	66	144.03	146.89	.89	--
Anomie Scale	60	13.72	12.27	1.16	--
Motivational Intensity	67	10.18	10.15	.06	--

*Differences due to failure of subjects to complete tests

TABLE III
COMPARISONS OF THE MEANS
CONVERSATION AND NON-CONVERSATION GROUPS
Study I

Tests	d.f.*	Mean Conver- sation	Mean Non- Conver- sation	t	P
F-Scale	57	98.97	102.45	.51	--
French-Attitude Scale	57	147.76	142.54	1.35	--
Anomie Scale	51	14.26	11.78	1.82	--
Motivational Intensity	56	10.13	10.45	.51	--

*Differences due to failure of subjects to complete tests

TABLE IV
COMPARISONS OF THE MEANS
DROP-OUTS AND COMPLETORS

Study I

Tests	d.f.*	Mean Drop-Outs	Mean Completers	t	P
F-Scale	93	95.12	101.51	1.43	--
French-Attitude Scale	91	149.32	145.63	1.56	--
Anomie Scale	85	12.12	12.94	.65	--
Motivational Intensity	93	9.96	10.17	.40	--

*Differences due to failure of subjects to complete tests

TABLE V
INTERCORRELATIONS OF SCALES USED
FOR GROUP OF COMPLETORS
Study I

Measures	Beginners		Advanced		Total	
	N	r	N	r	N	r
Motivational Intensity and F-Scale	30	.24	38	.28*	68	.25**
Motivational Intensity and French-Attitudes	28	-.02	38	-.16	66	-.10
French-Attitudes and F-Scale	30	-.55***	37	-.08	67	-.34***
Anomie and F-Scale	29	.24	32	.29*	61	.29**
Anomie and French-Attitudes	27	-.38**	32	-.40**	59	-.40***
Anomie and Motivational Intensity	27	-.17	33	.10	60	-.02

* = $P < .10$ ** = $P < .05$ *** = $P < .01$

TABLE VI
CORRELATION MATRIX
Study II

Measures	1	2	3	4	5	6	7	8	9
1. F-Scale	---	.10	.18	-.13	.01	-.23	.12	.06	-.17
2. French-Attitudes		---	.03	-.16	-.16	.32	-.02	.02	.34
3. Motivational Intensity			---	.30	.29	-.20	.15	-.03	-.15
4. French Grammar and Comprehension				---	.85	.40	.28	.13	-.04
5. French Text and Translation					---	.43	.46	.32	.00
6. Otis Intelligence						---	.23	.25	-.04
7. English Comprehension							---	.47	.04
8. English Literature								---	-.34
9. Orientation Index									---

Most of the correlations are based on an N of 53.

For 50 d.f. -- $r = .273$ $P < .05$

$r = .354$ $P < .01$

For 40 d.f. -- $r = .304$ $P < .05$

(Otis) $r = .393$ $P < .01$

TABLE VII
CORRELATION MATRIX

Study III

Measures	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Achiev. ratings	--	08	10	-08	40	16	42	22	28	28	-01	18	-06	34
2. F-Scale		--	27	04	24	-14	-19	03	15	-02	-07	13	31	-02
3. French-Attitudes			--	-03	44	16	-05	-18	13	23	15	32	28	42
4. Aud. Sens. Inv.				--	-10	08	00	-07	05	-08	03	-37	14	-04
5. Motiv.-Intensity					--	01	12	13	22	20	04	22	04	44
6. Same-Opposites						--	56	22	34	48	30	37	24	-14
7. Verbal Analogy							--	41	44	40	21	53	12	14
8. Number Learning								--	33	04	10	25	-18	-24
9. Phonetic Script									--	47	31	58	28	21
10. Spelling Clues										--	29	43	08	-04
11. Words in Sentences											--	13	22	17
12. Paired Associates												--	43	08
13. Sex													--	01
14. Orient. Index														--

TABLE VIII
CENTROID FACTOR MATRIX
Study III

Measures	I	II	III	Communalities
1. Achiev. Ratings	.459	-.127	.485	.46
2. F-Scale	.188	.384	-.247	.24
3. French-Attitudes	.450	-.481	-.250	.50
4. Aud. Sens. Inv.	-.010	.021	.152	.02
5. Motiv.-Intensity	.477	-.474	.291	.54
6. Same-Opposites	.538	.465	.142	.53
7. Verbal Analogy	.617	.449	-.345	.70
8. Number Learning	.247	.376	-.315	.30
9. Phonetic Script	.734	.233	.050	.60
10. Spelling Clues	.544	.253	.133	.38
11. Words in Sentences	.366	.163	.127	.18
12. Paired Associates	.649	.105	.105	.44
13. Sex	.393	-.059	-.528	.44
14. Orient. Index	.297	-.462	.249	.36

TABLE IX
ROTATED FACTOR MATRIX
(ORTHOGONAL)

Study III

Measures	I	II	III	Communi- alities
1. Achiev. Ratings	.470	.474	-.125	.46
2. F-Scale	.215	-.315	.303	.24
3. French-Attitudes	-.100	.514	.472	.50
4. Aud. Sens. Inv.	.074	.024	-.130	.02
5. Motiv.-Intensity	.190	.701	.040	.53
6. Same-Opposites	.688	-.093	.198	.52
7. Verbal Analogy	.486	-.210	.646	.70
8. Number Learning	.218	-.310	.400	.30
9. Phonetic Script	.645	.158	.389	.59
10. Spelling Clues	.572	.081	.210	.38
11. Words in Sentences	.394	.070	.110	.17
12. Paired Associates	.545	.244	.294	.44
13. Sex	-.004	.004	.659	.43
14. Orient. Index.	.056	.599	-.026	.36

APPENDIX B

TESTS USED IN STUDY I

1. California F-Scale (Ref. 1)
2. French-Attitude Scale, pp. 45-47.
3. Anomie Scale (Ref. 17)
4. Motivational-Intensity Scale, pp. 48-49.

FRENCH-ATTITUDE SCALE

The following statements deal with opinions about the French-Canadians about which some people agree and other disagree. Please mark each statement in the left-hand margin according to your agreement or disagreement, as follows:

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

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

Do not ponder too long over your responses; usually the first reaction is most reliable.

- _____ 1. In general, Canadian industry stands to benefit from the employment of French-Canadians.
- _____ 2. There is likely to be a lot of disagreement about the proper way to do the work where English- and French-Canadians work together.
- _____ 3. An employer should choose his employees on the basis of their ability to do the work rather than on the fact that they are French- or English-Canadians.
- _____ 4. Where English- and French-Canadians work together, it would be better if their contacts with each other were limited to those which are necessary to the work itself.
- _____ 5. I would be quite willing to work for a French-Canadian employer.
- _____ 6. If a union were on strike, the French-Canadian union member could be depended on to cooperate in any actions necessary to make the strike successful.
- _____ 7. Generally speaking, it would be better if French-Canadians did not become officers in unions.
- _____ 8. Compared to the English-speaking-Canadians, the French-Canadians are too much interested in their own prosperity and not enough interested in the general prosperity of Canada.

- _____ 9. If French-Canadians are allowed to join a social or recreational club whose members are mainly English-Canadians, there is a danger that the French-Canadians will try to change the club's established purpose.
- _____ 10. English-Canadians would learn more interesting ways of cooking, serving food, and entertaining, if they would get together with the French-speaking-people in Quebec for social occasions.
- _____ 11. Generally speaking, French-Canadian businessmen are as trustworthy as their English speaking counterparts.
- _____ 12. In social clubs to which both English- and French-Canadians belong, the French-Canadians should have the same chance as the English-Canadians to hold responsible positions.
- _____ 13. Where there are French-Canadians in a community, English-Canadians should willingly invite them into their homes in order to get acquainted.
- _____ 14. It is annoying the way French-Canadians stick to their own language at social gatherings where both English- and French-Canadians are present.
- _____ 15. Compared to English-speaking Canadians, the French-Canadians are much more likely to look upon family members mainly as sources of income.
- _____ 16. French-Canadian employees may be expected to show as much pride in the company's achievements as other Canadian employees do.
- _____ 17. French-Canadians, if accepted for union membership, can help the union reach its objectives -- such as satisfactory working conditions and adequate rates of pay.
- _____ 18. If French-Canadians are accepted as members of social clubs in the community, there is a danger that they will try to take over positions of leadership.
- _____ 19. If French-Canadians were allowed to join Canadian social clubs, it would interfere with the general enjoyment of the English-Canadian members.
- _____ 20. The presence of French-Canadian families will lower the importance of the family in Canadian community life.

- _____ 21. To avoid antagonisms within their own families, English-Canadians should not consider marriage with French-Canadians.
- _____ 22. As far as I am concerned, English-Canadian families would lose social standing if any of their members married French-Canadians.
- _____ 23. Any community should be glad to accept French-Canadians.
- _____ 24. If a new housing development were built in your neighborhood, French-Canadians should have the same opportunity as English-Canadians to obtain a house or apartment.

MOTIVATIONAL-INTENSITY SCALE

Following, there are four statements with five possible answers each. You are asked to select, for each statement, that answer which best describes your behavior. If none of the four alternatives appear to be applicable in your case, fill in item 'e', and then choose that item.

Indicate your answer by encircling the letter to the left of the answer.

1. On the average, I spent about the following amount of time doing home study for this course:
 - a. seven hours per week
 - b. eleven hours per week
 - c. four hours per week
 - d. no time at all spent on home study
 - e. none of these (give approximate number) _____ hrs.
per week.

2. If you had found yourself unable to continue the course would you have:
 - a. given up studying French altogether
 - b. paid someone to tutor you
 - c. tried to pick up French on your own, from everyday experience
 - d. secured some French texts and set aside a few hours per week to study
 - e. none of these (explain) _____

3. I try to speak French:
 - a. every opportunity I get
 - b. only with good friends
 - c. not at all
 - d. only when I have to
 - e. none of these (explain) _____

4. During the year, when I missed some of the classes it was usually because:

- a. I just didn't feel like going to the lecture that night.
 - b. I had to because of some extremely important (personal, or business) event which had come up.
 - c. there was something on in town (i.e. play, movie, dance, etc.) that I wanted very much to attend
 - d. I never missed a class
 - e. none of these (explain) _____
-

APPENDIX C

TESTS USED IN STUDY II

1. California F-Scale (Ref. 1)

Three items dealing with sex were removed from the scale to comply with the wishes of the school board authorities. The scale as used contained 25 items.

2. French-Attitude Scale, p. 52.

3. Motivational-Intensity Scale, pp. 53-54.

4. Orientation Index, p. 55.

Criteria for classification of subjects as follows:

- a. Integratively motivated: if alternatives "b" or "c" ranked first.
- b. Instrumentally motivated: if alternatives "a" or "d" ranked first.

Biserial correlation is positive if integratively motivated students tended to score higher on other tests.

FRENCH-ATTITUDE SCALE

The following sentences are not completed and we want you to complete each one the way you feel it should end. There are no right or wrong endings; we are interested in how you end each one.

1. Children of French Canadian parents _____

2. The more I get to know French-Canadians _____

3. French-Canadians _____

NOTE: In the original form, this Scale contained 14 items. Scoring categories developed as a result of the pretesting proved inadequate for all but three of the sentences. As a result, only these three sentences were used and scored:

- +1, favorable completion
- 1, unfavorable completion
- 0, neutral or meaningless completion.

MOTIVATIONAL-INTENSITY SCALE

Following, there are four statements with three possible answers each. You are asked to select, for each statement, that answer which best describes your behavior. If none of the alternatives appear to be applicable in your case, fill in the free alternative, and then choose that item.

Indicate your answer by encircling the letter to the left of the alternative.

1. On the average, I spend about the following amount of time doing home study in French:

- a. seven hours per week
- b. four hours per week
- c. one hour per week
- d. none of these (give approximate number) _____ hrs.
per week

2. I try to speak French:

- a. every opportunity I get
 - b. not at all
 - c. only when I have to
 - d. none of these (explain) _____
- _____

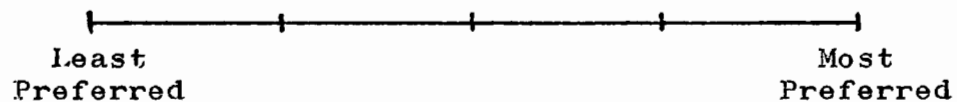
3. After I finish High School, I probably will:

- a. use my French as much as possible
 - b. continue studying French (e.g. night school, etc.)
 - c. forget what French I know, or use it very little
 - d. none of these (explain) _____
- _____

4. I enjoy reading French newspapers and magazines:

- a. only once in a while if they appear interesting
 - b. every opportunity I get
 - c. never
 - d. none of these (explain) _____
- _____

Place one check mark, anywhere along the line below, to indicate your degree of preference for French in relation to your other courses. (consider only the subject matter)



ORIENTATION INDEX

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', the alternative most applicable in your case, '2', 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 two alternatives appear to be equal, give them the same ranking.

NOTE. If item 'e' is included, the ranks will run from '1' to '5'.

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-Canadian 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: _____
- _____

APPENDIX D

TESTS USED IN STUDY III

1. Achievement ratings.

Teachers' ratings on a five-point scale, "oral skills," and "aural comprehension," combined for one achievement rating; standardized scores used in correlations.

2. California F-Scale (Ref. 1)

Three items dealing with sex were removed from the scale to comply with the wishes of the school board authorities. The scale as used contained 25 items.

3. French-Attitude Scale, pp. 58-59.

4. Audience Sensitivity Inventory, pp. 60-61.

Developed by Mr. A. Paivio, McGill University, this scale is a measure of the typical anxiety responses made by an individual in a variety of social situations. It was included in the present battery because it was thought that this anxiety might deter a student from practicing the word sounds of the second language. The expected negative correlation between this scale and the measure of achievement was not obtained.

5. Motivational Intensity Scale, pp. 62-63.

6. Same-Opposites Test.)

A.C.E. College Entrance
Examination, 1943)

7. Verbal Analogy Test.)

8. Number Learning)

9. Phonetic Script)

10. Spelling Clues)

From J. B. Carroll's
"Psi-Lambda Foreign
Language Aptitude Battery"
(Ref. 4)

11. Words in Sentences)

12. Paired Associates)

13. Sex

Biserial correlation is positive if females tended to score higher on the tests.

14. Orientation Index (See Appendix C for comments), p. 64.

FRENCH-ATTITUDE SCALE

The following statements are opinions which have been expressed concerning the French-Canadians and their culture. Some people agree with them; others disagree. You are asked to mark each statement in the left-hand margin according to your agreement or disagreement, as follows:

+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. French Canadians add a distinctive flavour to Canadian culture.
- _____ 2. They have produced outstanding artists and writers.
- _____ 3. The French-Canadian people, by learning both languages show a greater interest in Canada than do the English-Canadians.
- _____ 4. The more I get to know the French-Canadians, the more I want to be fluent in their language.
- _____ 5. French-Canadians are strongly liberal in philosophy and politics.
- _____ 6. They have preserved much of the beauty of the old Canadian folk-ways.
- _____ 7. Their undying faith in their religious beliefs is a positive force in this modern world.
- _____ 8. The French-Canadian has every reason to be proud of his race and culture.
- _____ 9. If Canada should lose the French culture of Quebec, it would indeed be a great loss.
- _____ 10. French-Canadians are much more polite than their English-speaking counterpart.
- _____ 11. They are a warm-hearted people.
- _____ 12. English-Canadian children learn much of value by associating with French playmates.

- _____ 13. French-Canadians have solid, permanent family ties.
- _____ 14. English-Canadians can learn better ways of cooking, serving food, and entertaining from the French-Canadians.
- _____ 15. French-Canadians are generous and hospitable to strangers.
- _____ 16. They appear to really enjoy life.
- _____ 17. More people should make an effort to learn French.
- _____ 18. French-Canadians, through their influence upon Canadian political thought have kept Federation from dominating the Canadian scene.
- _____ 19. The French-Canadians have maintained the importance of family life.
- _____ 20. It is wrong to try to Anglicize the French-Canadian.

AUDIENCE SENSITIVITY INVENTORY

The questions in this inventory refer to ways of reacting to situations which we frequently encounter. Please read each question carefully and decide which of the five possible answers suggested (Never; Hardly ever; Sometimes; Almost always; Always) would be most appropriate for you personally, then encircle that answer. Be sure to give One, and only one, answer to each question.

Please remember that there are no right or wrong answers, and also that the information from these questionnaires will be completely confidential, so that you may feel free to answer each question truthfully--in fact the success of this research depends on your honesty.

If you have any questions, please ask them now. Otherwise, proceed to the inventory.

1. Are you talkative at social gatherings?
Never; Hardly ever; Sometimes; Almost always; Always
2. Do you tend to feel self-conscious in the presence of people you consider your superiors?
Never; Hardly ever; Sometimes; Almost always; Always
3. Do you consider yourself a shy person?
Never; Hardly ever; Sometimes; Almost always; Always
4. Would you criticize or question a public speaker or lecturer?
Never; Hardly ever; Sometimes; Almost always; Always
5. Can you express yourself better in writing than in speech?
Never; Hardly ever; Sometimes; Almost always; Always
6. Do you get stage fright?
Never; Hardly ever; Sometimes; Almost always; Always
7. Do you make friends easily?
Never; Hardly ever; Sometimes; Almost always; Always
8. Do you avoid taking the responsibility of introducing people at a party?
Never; Hardly ever; Sometimes; Almost always; Always
9. If you came late to a meeting, would you rather stand than take a front seat?
Never; Hardly ever; Sometimes; Almost always; Always
10. Do you find it difficult to speak before a group?
Never; Hardly ever; Sometimes; Almost always; Always

11. Have you been the recognized leader (president, captain, chairman) of a group within the last five years?
Never; Hardly ever; Sometimes; Almost always; Always
12. Do you tend to keep in the background at social functions?
Never; Hardly ever; Sometimes; Almost always; Always
13. Do you have difficulty in starting a conversation?
Never; Hardly ever; Sometimes; Almost always; Always
14. Do you feel self-conscious when you have to present an idea in a discussion group?
Never; Hardly ever; Sometimes; Almost always; Always
15. Does it make you uncomfortable to put on a stunt at a party even when others are doing the same sort of thing?
Never; Hardly ever; Sometimes; Almost always; Always
16. Are you easily discouraged when the opinions of others differ from your own?
Never; Hardly ever; Sometimes; Almost always; Always
17. Do you take the lead to enliven a dull party?
Never; Hardly ever; Sometimes; Almost always; Always
18. Are you more self-conscious than most people?
Never; Hardly ever; Sometimes; Almost always; Always
19. Do you enjoy telling stories or jokes at a party?
Never; Hardly ever; Sometimes; Almost always; Always
20. Are you troubled with feelings of inferiority?
Never; Hardly ever; Sometimes; Almost always; Always
21. Do you hesitate to enter a room by yourself when a group of people are sitting around talking together?
Never; Hardly ever; Sometimes; Almost always; Always

MOTIVATIONAL-INTENSITY SCALE

Answer the following questions by placing a check-mark (✓) to the left of the statement which appears most applicable to you. Try at all times to answer as accurately as possible.

1. How well do you like French in comparison to your other school subjects? Read the following statements, and check the one which best applies to you.

- ☐ 5. I like French better than all other subjects.
☐ 4. I like French better than most other subjects.
☐ 3. I like French about as well as my other subjects.
☐ 2. I dislike French.
☐ 1. I dislike French more than any other subject.

2. How easy or difficult do you find French in comparison to your other subjects?

- ☐ 5. I find French easier than all my other subjects.
☐ 4. I find French easier than most other subjects.
☐ 3. I find French of about the same level of difficulty as my other subjects.
☐ 2. I find French harder than most other subjects.
☐ 1. I find French harder than all my other subjects.

3. On the average, I spend about the following amount of time doing home study in French: (include all homework other than written exercises)

- ☐ a. seven hours per week
☐ b. four hours per week
☐ c. one hour per week
☐ d. none of these. (give approximate number of hrs. per week.) _____ hrs.

4. I try to speak French:

- ☐ a. every opportunity I get
☐ b. not at all
☐ c. only when I have to
☐ d. none of these (explain) _____

5. I read French newspapers and magazines:

- ☐ a. whenever I get the opportunity
 - ☐ b. only once in a while if they appear interesting
 - ☐ c. never
 - ☐ d. none of these (explain) _____
-

6. After I finish High School, I probably will:

- ☐ a. use my French as much as possible in everyday conversation.
 - ☐ b. continue studying French (e.g. night school, university, etc.)
 - ☐ c. forget what French I know, or use it very little
 - ☐ d. none of these (explain) _____
-

7. I believe French should be:

- ☐ a. taught to all high school students.
- ☐ b. taught only to those students who wish to study it.
- ☐ c. omitted from the school curriculum.

8. I find studying French:

- ☐ a. interesting and challenging.
- ☐ b. interesting but not challenging.
- ☐ c. challenging but not interesting.
- ☐ d. neither challenging nor interesting.

ORIENTATION INDEX

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', the alternative most applicable in your case, '2', the next most applicable, and so on. If two alternatives appear to be equal, give them the same ranking.

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. However, please note that if item 'e' is included, the ranks will then run from '1' to '5'.

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-Canadian 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: _____
-

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