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AUTHOR Gardner, R. C.; And Others  
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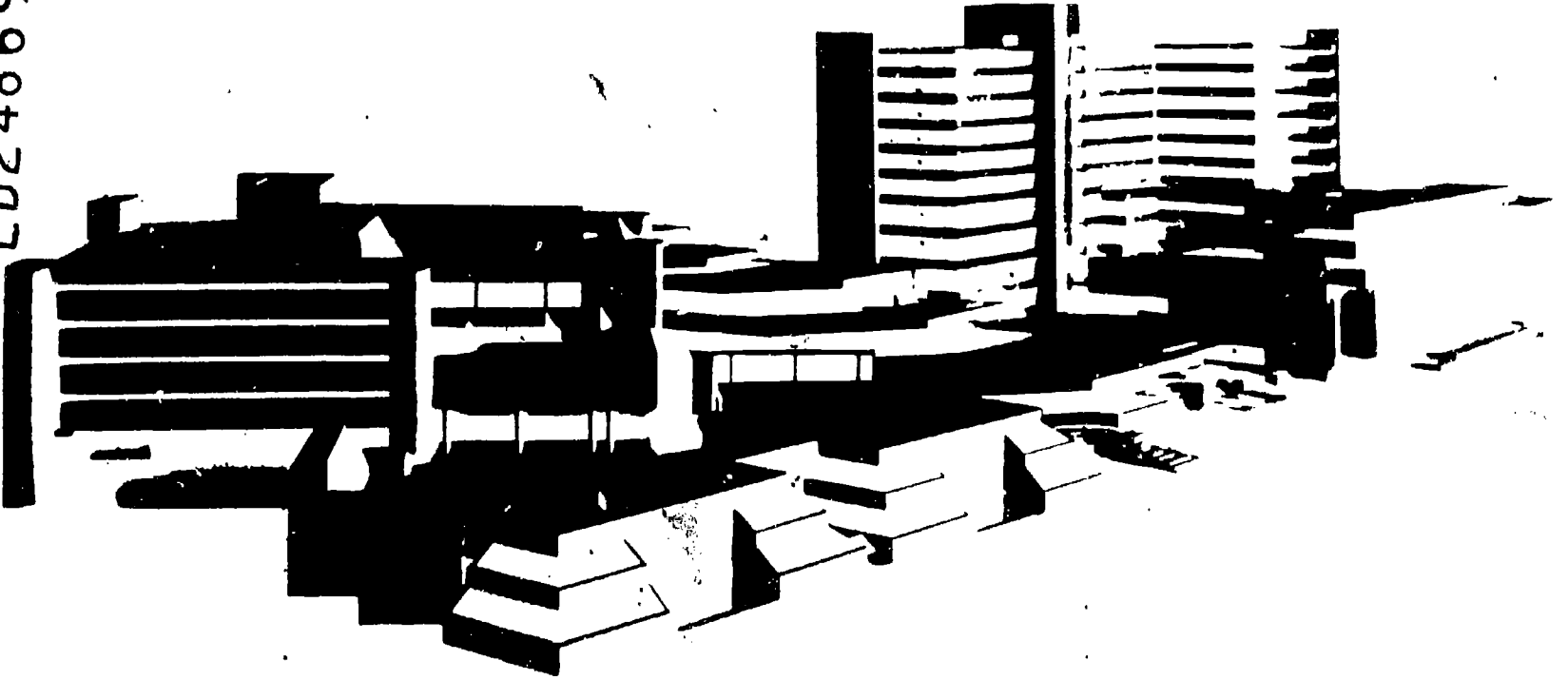
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ABSTRACT

An investigation of the stability and replicability of aptitude, attitude, and achievement factors in second language acquisition used 31 groups of over 100 second language students each from five grade levels (7-11) and seven Canadian geographic areas of varying degrees of bilinguality. The groups were administered a series of related measures that were factor analyzed within groups. Although the number and type of variables used in the groups varied slightly, these primary factors emerged: integrative motive, French achievement, self-perception of French competence, language aptitude, evaluation of the learning situation, evaluation of the French teacher, evaluation of the French course, multilingualism, and semantic differential. Another set of analyses involved the factor analysis of the original factor matrices for a more rigorous test of comparability across samples. This demonstrated that the factors of evaluation of the learning situation, self-perception of French competence, French achievement, and integrative motive were consistent across all grade levels within monolingual regions and across lower grade levels within bilingual regions. Similar consistency was demonstrated only for the factors of evaluation of the learning situation and integrative motive within bilingual regions for the upper level students. Interpretations for these results are offered. (Author/MSE)

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# DEPARTMENT OF PSYCHOLOGY

THE UNIVERSITY OF WESTERN ONTARIO LONDON, CANADA

## Abstract

The purpose of this paper was to investigate the stability and replicability of aptitude, attitude and achievement factors involved in second language acquisition. Thirty-one samples of second language students from five grade levels and seven different geographical areas (in terms of extent of bilinguality) were given a series of related measures which were factor analysed within samples. Although the number and type of variables used in the samples differed slightly, a number of primary factors emerged. These were defined as Integrative Motive, French Achievement, Self Perception of French Competence, Language Aptitude, Evaluation of the Learning Situation, Evaluation of the French Teacher, Evaluation of the French Course, Multilingualism and Semantic Differential. A further set of analyses involved the factor analysis of the original factor matrices in order to provide a more rigorous test of the comparability of factors across samples. The results demonstrated that the factors of Evaluation of the Learning Situation, Self Perception of French Competence, French Achievement and the Integrative Motive were consistent across all grade levels within monolingual regions and across elementary grade levels within bilingual regions. Similar consistency was demonstrated only for the factors of Evaluation of the Learning Situation and the Integrative Motive within bilingual regions for the secondary school level students. Interpretations for these patterns were offered.

# The Nature and Replicability of Factors in Second Language Acquisition<sup>1</sup>

R. C. Gardner, P. C. Smythe<sup>2</sup> and R. N. Lalonde

University of Western Ontario

Many studies have examined the factorial structure underlying measures of attitudes, motivation, language aptitude and second-language achievement (see, for example, Clément, Gardner & Smythe, 1977; Gardner and Lambert, 1959, 1972; Glikzman, 1981; Lalonde, 1982). Although the studies are in agreement in demonstrating that both attitudinal/motivational variables and language aptitude are related to measures of second language achievement, it is not clear that the same dimensions emerge in each analysis. There are, of course, many reasons for possible differences in factor structures. One is simply the different analytic solutions. Differences exist in the initial factor solutions (centroid, principal axis, principal components), the criteria for the number of factors, and the final rotational systems used (graphical, orthogonal, oblique, etc.). A second difference concerns the type of measures used. Some studies use tests with the same descriptive labels (e.g., Attitudes toward French Canadians) even though the items comprising each test differ considerably. A third difference is in the age of the samples tested, which varies from elementary school to university level. And, of course, the studies have been conducted in a number of different geographical, political and social settings. One can add to this list the further complication that, given the same data, two researchers can look at the same factor pattern and arrive at conclusions which on the surface appear very different. With so many possible sources of variability, it seemed meaningful to assess the stability and replicability

of factor structures across a number of age ranges and geographical areas.

The major question addressed here is simply, "What are the primary dimensions of individual differences in attitudes, motivation and language aptitude that can be identified in second language acquisition?". The question is answered by considering data previously unpublished which involves comparable tests administered to a number of different samples. In this way we can eliminate many of the confounding factors listed above. To study factor replicability, there must be uniformity in the type of tests administered to each sample, the type of factor analytic solution employed, the criteria for factor extraction, the rotational system used, and the rules for factor identification. Furthermore, these must be made explicit. It would be beneficial, however, if the samples could be drawn from a wide variety of situations and age ranges. Needless to say, this aim clashes to some extent with that of uniformity. If the same tests are used, there must be some restriction in age range of the samples and the second language under investigation. Within some restrictions, however, the present investigation satisfied both objectives by focusing on seven regions across Canada and five grade levels, though complete comparability of tests could not be maintained across all ages.

The sampling procedure employed does permit, however, a consideration of other questions which derive from the major one. First, given that students were sampled across five grade levels, information is provided about the relevance of the various factors to different ages and stages of second language training. Second, by sampling students in seven different geographical areas, answers concerning regional differences can be obtained. In the present instance, some areas can be classified as bilingual in that

both English and French tend to be used with relative frequency and the students have ample opportunity to experience their second language. Other regions are better classified as monolingual ones. This is not to suggest that English is used exclusively there. Many languages including French are present, but in general the predominant language is English. Opportunities to have experience with French are not numerous.<sup>3</sup>

### Method

#### Subjects

The data for this "investigation" were obtained from 31 samples of students drawn from seven regions in Canada, four classified as monolingual and three as bilingual. Within all but two regions, students were selected by classroom from five different grade levels, grades 7 to 11 inclusive. In one region students were selected from grades 8 to 12, though the data from the grade 9 students is not presented because the tests administered to them were not identical with those administered to all other grade 9 classes. Furthermore, the grade 12 sample was omitted since it was the only one at this level. Finally, in another region administrative restrictions permitted testing only of students in grades 9 to 11. The sample sizes in each grade/region category are presented in Table 1. The regions are referred

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 Insert Table 1 about here  
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to as M1 to M4 for the four monolingual settings, and B1 to B3 for the bilingual ones in order to maintain confidentiality (these codes being assigned randomly to the regions).

#### Materials

The tests administered to the students in elementary school (the grade 7-8 students) differed slightly from those administered to the secondary

school students. The differences resulted for two reasons. First, the elementary students tended to require more time to complete the attitude battery than the secondary students. Consequently, in order to finish the testing within the prescribed time limits, the attitude battery for the elementary students omitted some tests (see below). Second, the students in the elementary schools were much less advanced in their French training than the secondary students and often had not been introduced formally to the written aspects of French. As a result, the indices of French achievement employed with them involved more rudimentary aspects of French and in most instances avoided recourse to written French. Within both the elementary grades and secondary grades, however, measures of French achievement were used which had sufficient ranges of difficulty. As a result, the same measures were used with all grade 7 and 8 samples, permitting direct comparisons of factor composition across these two grade levels. Similarly, identical tests were used for all grades in the secondary school, permitting comparisons of factor structures across those grade levels. Direct comparisons between the elementary and secondary samples are therefore not meaningful, though as will be evident many common patterns are observable.

Following is a description of the measures obtained. Variables 1 to 33 were assessed on both the elementary and secondary school samples.

1. Spelling Clues. Scores on this Modern Language Aptitude Test (MLAT) (Carroll and Sapon, 1959) subtest are dependent upon a student's knowledge of English vocabulary as well as a "sound symbol association ability" reflecting a student's capacity to learn correspondences between speech sounds and orthographic symbols.
2. Words in Sentences. This MLAT subtest purports to measure a student's sensitivity to grammatical structure.

3. Paired Associates. This MLAT subtest is a measure of the student's rote memory.
4. Need Achievement. This scale consists of five positively worded and five negatively worded items assessing need achievement. A high score indicates a need to do well in any task attempted.
5. Ethnocentrism. Ten items derived from the Other Minorities and Patriotism subscale of the California Ethnocentrism Scale (Adorno et al., 1950) and the Children's Ethnocentrism Scale (Frenkel-Brunswik, 1949) comprise this measure. A high score on this scale reflects the belief that one's own cultural community is superior to other cultural groups.
6. French Class Anxiety. This is a five item scale with a high score reflecting Ss' degree of discomfort about participating during French class.
7. Attitudes Toward French Canadians. This scale contains 10 positively worded items relating to French Canadian people. A high score indicates a positive attitude.
8. Interest in Foreign Languages. This measure consists of ten positively worded items designed to assess Ss' general interest in studying foreign languages.
9. Instrumental Orientation. Four items stressed the pragmatic or utilitarian value of learning French. A high score suggests that S sees purely practical reasons for learning French.
10. Integrative Orientation. The four items in this scale emphasize the importance of learning French to afford Ss the opportunity to interact socially and learn more about the second language community.



11. Parental Encouragement to Learn French. Ten positively worded items ask Ss to rate the extent to which their parents actively encourage them to study French. A high score reflects a high degree of parental support.
12. Attitudes Toward Learning French. This is a 10 item scale adapted from one developed by Randhawa and Korpan (1973) with half the items worded positively and half negatively. A high score indicates a positive attitude.
13. Attitudes Toward European French People. Because some students of French may view people from France as the most appropriate language models, a 10 item, positively worded scale was developed. A high score suggests a positive attitude.
14. Motivational Intensity. These 10 multiple choice items are designed to measure the amount of effort Ss expend on learning French. A high score represents a high degree of effort.
15. Desire to Learn French. Ten multiple choice items are included in this scale with a high score expressing a strong desire to learn French. This scale differs from the Motivational Intensity scale in that it indexes the degree to which Ss want to learn French as opposed to the effort expended.
16. Orientation Index. Ss were presented with four possible reasons for studying French, two stressing the instrumental, and two the integrative value. Ss had to choose one of the four alternatives as being closest to their own reasons for taking French, and each S was classified as being either primarily instrumental (1) or integrative (2) in his/her orientation.
17. Behavioural Intention to Continue French. Ss were asked if they intended to take French next year. Their answers were coded 1 for yes, 2 for

I don't know, and 3 for no.

18. Opportunity to Use French Outside of School During the Preceding Year.

An affirmative answer was coded 1, a negative, 2.

19. Number of Years Studying French. The number reported was used.

20. Number of Languages Spoken at Home. The number reported was used.

21. Number of Languages Student Speaks. The number reported was used.

Students' reactions to the concepts "My French Course" and "My French Teacher" were assessed by means of the semantic differential rating technique. Each concept was rated on a series of seven-point scales with the ends of each scale being anchored by pairs of descriptive bi-polar adjectives (e.g., friendly-unfriendly). The scales used can be found in Gardner (in press).

Student reactions to their French teacher were gauged by 25 scales which were scored to reflect the following four dimensions:

22. French Teacher - Evaluation. Ten scales were summed to reflect Ss' general evaluative reactions to their French teacher. A high score indicates a positive evaluation.
23. French Teacher - Rapport. Teacher-pupil rapport was measured by five scales such as approachable-unapproachable. The higher the score, the greater the perceived rapport and warmth of the teacher.
24. French Teacher - Competence. Ss' perceptions of their teacher's competence were tapped by five scales (e.g., organized-disorganized). A high score indicates a high degree of perceived competence.
25. French Teacher - Inspiration. The extent to which Ss felt their teachers inspired them was evaluated on five scales such as unimaginative-imaginative. High scores suggest high levels of inspiration.

The 25 scales used for the ratings of the French course were scored to yield the following measures:

26. French Course - Evaluation. Ss' general evaluative reactions to the course were assessed with ten scales scored so that the higher the score, the more positive Ss' evaluation of the course.
27. French Course - Difficulty. Five scales (e.g., simple-complicated) were summed to provide an estimate of the perceived difficulty of each course.
28. French Course - Utility. Five scales (e.g., meaningless-meaningful) were used. A high score indicates a high level of perceived utility.
29. French Course - Interest. Five scales such as dull-exciting were summed so that the higher the score, the greater the interest in the course.

Variables 30-33 were measures derived from Ss' self ratings on four aspects of French ability. Seven point scales varying from "Not at all" to "Fluently" were used for each skill. The skills were:

30. Self-rating - Writing.
31. Self-rating - Understanding.
32. Self-rating - Reading.
33. Self-rating - Speaking.

Following are the measures of French achievement. Those used for students in grades 7 and 8 are as follows:

34. Vocabulary. This test consists of 25 items presented in a test booklet. Each item consisted of a French word followed immediately by five English words, one of which corresponded most to the French word. The test was also taperecorded in that each French word was read twice, followed by a four second interval during which time students indicated their answer. The higher the score, the greater the French vocabulary knowledge.

35. Sentence Comprehension. This 10 item multiple choice tape recorded test was adapted from the French Comprehension Test - Kindergarten and the French Comprehension Test - Grade 1 (Ontario Institute for Studies in Education, 1974). The first five items consisted of French statements presented twice, and the task was to select from four pictures the one that best illustrated the meaning of each sentence. The second five items were questions asked twice in French; students were asked to pick the picture from four choices that best answered each question. A high score reflects good aural comprehension of French sentences.
36. Sentence Understanding. This test consists of 13 items designed to measure students' auditory comprehension of French sentences and was written specifically for this investigation. Students heard a sentence read twice in French and then had to decide if it made logical sense or not; for example, "Voici un garçon; c'est Suzanne". A high score indicates good sentence comprehension.
37. Paragraph Comprehension. This is a 15 item test adapted from the French Comprehension Test - Kindergarten and the French Comprehension Test - Grade 1 (Ontario Institute for Studies in Education, 1974) with suitable changes for older children. The students heard three short stories read twice in French, and following each story the students were asked to answer five questions which were asked twice in French. The children circled the picture chosen from four alternatives which best illustrated the answer to each question. A high score indicates good aural comprehension for extended French passages.
38. Gender Identification. This 30 item test, developed for this investigation, consisted of 15 masculine and 15 feminine French nouns arranged randomly. Beside each noun was written both "un" and "une" under the headings

Masculine and Feminine. The students heard each noun read twice and were asked to circle the appropriate gender identification. Half of the words were common, and the others were less common nouns but were selected because their endings could give clues to their gender. A high score indicates a sensitivity to noun gender and an ability to generalize from known gender to probable gender.

39. Grade. Students' final French grades were obtained from the school records.

The following measures were used with students in grades 9-11. Variables 34-36 are subtests of the Canadian Achievement Tests in French (CATF)(1961). The CATF is a standardized paper and pencil test that is made up of four parts and is normally administered to students as an unpaced test with a one hour time limit. In this investigation, the fourth subtest, pronunciation, was omitted and time limits were imposed on each of the other three subtests with the provision that if students completed one subtest before the time limit expired they could return to earlier subtests. This test was presented via a tape recorder. The subtests are:

34. CATF - French Vocabulary. This subtest consists of 35 multiple choice items in 5 different formats. Each item consists of a word or phrase followed by five alternatives. The first three parts consist of a stimulus word followed by 5 alternatives. Part I (5 items) has English stimulus/French alternatives, part II (11 items) uses a French/French format and part III (9 items) a French/English format. Part IV (7 items) involves selecting from among five pairs of French words the one pair in each item most nearly opposite in meaning to each other. Part V presents three French sentences with one word missing, and students must select from five alternatives the French word that is most appropriate.

Students were given five minutes to complete the test. A high score indicates substantial French vocabulary knowledge.

35. CATF - French Grammar. This subtest consists of 45 multiple choice items and is made up of three sections. The first section (28 items) presents an English sentence followed by its French translation with one word omitted. The appropriate word from five French alternatives must be selected. The second part (15 items) presents a French sentence with one word omitted with selection from among five French alternatives. The third section (two items) presents English phrases, and the correct French translation must be selected from five alternatives. A time limit of 11 minutes was given. A high score indicates a good command of French grammar.
36. CATF - French Comprehension. This test consists of 10 items and is made up of two sections. Six items relate to three written selections of French prose where there are two questions (in French) about each selection. Four items are incomplete French sentences, and students are required to select from five alternatives the word or phrase which most logically completes the sentence. Students were given five minutes. A high score indicates a good comprehension of written French.

The following scales were designed to measure the students' aural French skills rather than their reading or writing ability.

37. Paragraph Comprehension. This 10 item test was adapted from the MLA Cooperative Foreign Language Tests (1963). Three stories were presented via a tape recorder twice in French. Following each story, the student was required to answer three or four multiple choice questions in French. The test required seven minutes. A high score indicates good comprehension of aural French.

38. Sentence Completion. In this 10 item test, the students heard an incomplete French sentence read twice, and after each stimulus sentence they were required to select from four printed French alternatives the one that best completed the sentence. The test took five minutes. A high score was indicative of good aural French comprehension.
39. Grade. Students' final French grades were obtained from the school records.

Students were asked to evaluate the concepts, French Canadians, Myself, European French and English Canadians by making use of the semantic differential. Each concept was rated on 25 scales, but the evaluative score consisted of the sum of the following ten scales, properly reflected, good-bad, friendly-unfriendly, unreliable-reliable, insincere-sincere, dependable-undependable, untrustworthy-trustworthy, honest-dishonest, unpleasant-pleasant, kind-cruel, and impolite-polite. A high score indicates a favourable evaluation. The four variables were:

40. French Canadians - Evaluative.
41. Myself - Evaluative.
42. European French - Evaluative.
43. English Canadians - Evaluative.

#### Procedure

The students were tested three times throughout the year. The language aptitude battery (Variables 1-3) was administered near the beginning of the academic year, the attitudinal/motivational measures (Variables 4-29 and 40-43 for secondary school students) were administered three to four months later, and the various achievement measures were given three months later near the end of the academic term.

## Results and Discussion

The data were standardized within each school at each grade level. Following this, Pearson product-moment correlation coefficients were computed among the variables for each sample. The correlation matrices were then subjected to principal axes factor analyses. The highest absolute correlation for each variable served as its communality estimate. In each sample, all factors with eigenvalues greater than 1.0 were retained so that a uniform criterion was used to estimate the number of factors. As a result, the number of factors varied from sample to sample suggesting that the underlying dimensionality is greater in some areas than others.

There is no consistent pattern in the number of factors across age or region, and consequently the factor definitions which follow are not applicable to each sample. The definitions are, in fact, stylized descriptions which are offered in order to reduce the explanation of each factor matrix. Tables A1 to A3] (Appendix A) present the Varimax rotated factor matrices for the 31 samples. Material will be presented later to indicate the accuracy and stability of the factors identified.

Identification of the Primary Factors

Despite differences in the number and type of variables contained in the factor matrices for the elementary and secondary school samples, many of the factors obtained are comparable, and the following descriptions are applicable to both levels unless otherwise specified. The primary factors are:

1. Integrative Motive. The definition of the Integrative Motive factor is dependent upon a particular configuration of attitude and motivation variables.



The integrative motive reflects positive attitudes toward the second language community (e.g., French Canadians and/or the European French), a generalized interest in learning foreign (or second) languages, favourable attitudes toward learning the second language, an integrative orientation in second language study, and a heightened motivation and desire to learn the language. In terms of the variables comprising each of the factor matrices, this definition would require positive and substantial loadings from variables reflecting the description just given. These include French Canadian attitudes, Attitudes toward the European French, Interest in Foreign Languages, Attitudes toward Learning French, Integrativeness, Motivational Intensity, Desire to Learn French, French Canadian - Evaluation and European French - Evaluation.

Although these are the major variables defining the Integrative Motive dimension, other variables could contribute to the factor to the extent that they reflect comparable attitudinal or motivational properties. One example of such measures would be the Orientation Index which generally would contribute positively to this dimension (reflecting an integrative orientation). Since it is a dichotomous measure, however, it is potentially unreliable. Inspection of Tables A1 to A31 justifies this conclusion about its unreliability. Its communality is low, and it seldom contributes to any factor. Another example is ethnocentrism. Since the Integrative Motive reflects a positive regard for the second language community, ethnocentrism would be expected to load negatively on this dimension. Individual differences on the ethnocentrism scale could reflect other attributes such as nationalism or even intelligence which could moderate a negative relationship. In fact, the ethnocentrism scale does contribute negatively to the Integrative Motive factor 22 times, though substantially so only twice (see Tables A1 to A31).

A third measure that could contribute to the Integrative Motive Factor is an Instrumental Orientation. High scores on this measure can indicate that learning French is important and/or that it leads to utilitarian goals. Discussions of integrative and instrumental orientations often treat them as contrasting (Kelley, 1969), yet it is possible that individuals who have either orientation will agree that learning the second language is important. Integratively oriented individuals would undoubtedly see the utilitarian value of second language acquisition, while instrumentally oriented people demonstrate some willingness to interact with members of the other community. As a result, the two orientations would be expected to correlate (cf. Smythe, Stennett, and Feenstra, 1972) and the instrumental orientation could load on an Integrative Motive dimension, though it would not be expected to contribute as highly as the integrative orientation. In fact, the factor loadings for Integrative Orientation are higher than those for Instrumentality in 29 of the 33 Integrative Motive factors isolated and less only twice. Both of these, it should be added, were in bilingual samples.

II. French Achievement. The definition of the French Achievement dimension is based primarily on substantial loadings from Variables 34-39, the objective indices of French achievement in both the elementary and secondary school samples. Except for Variable 39, French grade, which reflects the teacher's evaluation based on any number of criteria, these measures are all dependent upon performance on objective paper and pencil tests of achievement. As a result, this dimension would also reflect variation associated with test-taking behaviour and ability in general. Because of this, as well as a direct link between verbal ability and achievement in a second language, it is not uncommon that the language aptitude indices often contribute substantially to this dimension. Furthermore, since self-ratings of achievement in a

second language reflect students' perceptions of their second language skills, it is conceivable that they too could be included on this factor. They may not, however, contribute substantially to the French Achievement dimension in all cases because they undoubtedly also reflect individual differences in self-confidence, anxiety over language competence, motivation, and the like.

III. Self Perception of French Competence. This dimension is defined primarily by the self-ratings of the four second language skills; writing, understanding, reading, and speaking (Variables 30-33). The nature of this dimension is such that it could also be expected to share variance in common with objective indices of French achievement, the measure of French Class Anxiety, and various attitudinal/motivational indices.

IV. Language Aptitude. Appreciable loadings from Variables 1-3, the three subtests of the Modern Language Aptitude Test (Carroll and Sapon, 1959) were involved in the definition of this dimension. In some cases the factor also included the objective indices of French Achievement causing some ambiguity in definition. The label Language Aptitude was applied to the factor in these cases if the magnitude of the loadings for the three measures of language aptitude tended to exceed those of the French achievement measures. Otherwise, the factor was identified as French Achievement. Although it might be argued that a more descriptive label might be Language Aptitude - French Achievement in such cases, the use of such a label would have caused confusion in those samples where an independent French Achievement factor was also isolated.

V. Evaluation of the Learning Situation. This factor is composed of reactions to two major features of the language learning context, the teacher and the course. Four assessments were made of the French teacher - evaluation, rapport, competence, and inspiration (Variables 22-25) and four of the French course - evaluation, difficulty, utility, and interest (Variables 26-29). Often,

however, students' perceptions of the difficulty of the French course did not contribute to this dimension, quite probably because such perceptions are less affective than the others. The definition of this factor consequently required appreciable loadings from at least the remaining seven assessments. In many instances, some attitudinal/motivational measures also contributed to this dimension, or alternatively some of the reactions to the teacher and/or the course contributed to the Integrative Motive dimension. Such overlap is to be expected since it would be reasonable to propose that integratively motivated individuals would tend to have positive affective reactions to both the French teacher and the French course.

VI. Evaluation of the French Teacher. This dimension is obviously a subset of that described above, but the label was employed in those situations where the four reactions to the French teacher contributed appreciably to the dimension while the reactions toward the course tended not to load on the factor. Invariably in such situations an independent factor of Evaluation of the French Course tended also to be isolated.

VII. Evaluation of the French Course. As indicated above, the definition of this factor resulted because of an apparent independence between reactions to the teacher and the course.

VIII. Multilingualism. The definition of this factor required appreciable loadings from Variables 20 and 21 (the number of languages spoken at home and the number spoken by the student) plus no additional clustering of variables indicative of a more psychologically meaningful construct.

IX. Semantic Differential. This dimension could appear only in the samples obtained from the secondary schools where considerable use was made of the semantic differential technique. This dimension would appear to be due primarily to method variance and is of little relevance to the present

discussion.

Other factors (generally not labelled) tend to emerge in some of the analyses, but generally those just described are the primary ones which appear with sufficient consistency to be considered relatively stable. Table 2 presents a summary of the factors obtained in all the samples. In

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the discussion to follow, emphasis will be focused on the similarities and differences across these samples.

#### Factor Replicability

An Integrative Motive factor was isolated in each of the samples, indicating that this dimension is stable across geographical regions and grades. In general, this dimension receives substantial loadings from the nine variables proposed to be the major defining characteristics, though the semantic differential assessments (Variables 40 and 42 in the secondary school matrices) are not consistent features. The hypothesized relations for the Ethnocentrism scale and the Orientation Index appear relatively infrequently, while that for the Instrumental Orientation occurs on all but one of the 33 Integrative Motive factors. This latter relationship could indicate simply that integratively motivated students see the pragmatic values of learning French. In 29 out of the 33 factors, French Course - Utility also contributes, suggesting that integratively motivated students are not mere idealists. They see the usefulness of language study!

There is also clear evidence that an integrative motive is implicated in the decision to continue French language study in that the Behavioural Intention to Continue Language Study contributes substantially to this dimension in 25 of the 33 factors. Although indices of French achievement

are not commonly substantial contributors to this dimension (only 8 samples have at least one self report or objective index of French achievement contributing appreciably), they do make minimal contributions (i.e., factor loadings in the range of .20 to .29 in 11 monolingual samples and five bilingual ones). In a total of 24 cases, there is some evidence that the integrative motive is related to second language achievement. It should be stressed that minimal loadings are more likely expected than larger ones simply because the overlap between affective components (i.e., the integrative motive) and performance components (i.e., the achievement indices) would not be that great. Furthermore, aspects of measurement variance (e.g., similar test formats) are not common to the two classes of variables.

A French Achievement dimension was common to all samples except two, the grade 7 sample in the B2 area, and the grade 8 sample in the M4 region. In these samples, the objective indices of achievement contributed mostly to the Self-Perception of French Competence dimension. The French Achievement dimensions identified in the other nine elementary school samples were generally independent of self ratings of competence. There is only one exception, and that occurs in a sample from a bilingual setting. Among the secondary school samples there is a greater contribution from self-rating measures on this dimension, particularly in bilingual areas. At least one self-rating variable contributes appreciably to seven of these factors, and five of these are from bilingual regions. That is, where there are opportunities to assess one's knowledge of the second language, there is a tendency for self appraisals of competence to reflect objective assessments of competence. There is also a tendency for the French Achievement dimension to relate to language aptitude, particularly at the earlier stages of language acquisition. Of the nine

French Achievement factors isolated at the elementary school level, eight received contributions from at least one language aptitude subtest. At the secondary school level, however, only 10 of the 21 factors isolated include this aptitude component -- moreover, nine of these were from monolingual samples. Clearly, language aptitude is most highly related to language achievement in the early stages of language learning or where language learning depends primarily on the school setting.

A Self-Perception of French Competence dimension was obtained in all but three samples, and these were all secondary school samples from the same bilingual region. As indicated earlier, this dimension was not restricted completely to the self-rating measure. In fact, in 17 of the 28 samples an appreciable contribution was made to this dimension by at least one of the objective indices of French achievement (Variables 34-39), and French grade (Variable 39) was involved in 12 of these samples. Self-perceptions tend therefore to have some convergent validity. A very similar factor was reported by Clément, Gardner and Smythe (1977, 1980) in their studies of students learning English. They identified it as Self-Confidence with English because the self-report indices of competence loaded positively while there were negative loadings from indices of anxiety. They argued that the self-confidence dimension reflected a positive evaluation of one's own skills and an absence of anxiety which resulted from experience in using the second language in the opportunities provided in a bilingual milieu.

Some evidence for a similar interpretation is suggested in the present data. The index of French Class Anxiety contributed negatively and substantially to this dimension in five of the elementary school samples; moreover, four of these were from the grade 8 samples, and three were from bilingual regions. At the secondary level, anxiety contributed to 11 of the factors, four of which

were from bilingual regions. Such results suggest that given a bilingual region or a sufficient level of competence so that opportunities exist for the student to use the language, there will be a negative relationship between anxiety and self-perceived competence. Clearly, however, the association is not sufficiently pronounced among these English speaking students to justify the conclusion that this reflects the Self-Confidence dimension reported by Clement et al. (1977, 1980). In fact, Clement (1980) and Giles and Byrne (1982) have proposed that Self-Confidence would play a more important role among minority group members learning a majority group language because of the greater number of situations where individuals would be expected to use their language skills.

The dimension of Language Aptitude was obtained with only three of the 11 elementary school samples and 12 of the 20 secondary school samples. Clearly this increased representation at the higher grade levels reflects the finding reported above that at the secondary school level the aptitude tests did not contribute very frequently to the French Achievement dimension. What is evident in this set of Language Aptitude factors is that, although objective indices of French achievement make some contribution (six of the 15 factors), there is a close association between Language Aptitude and French grades. Of the 14 matrices where grade was included as a variable, it contributed to this dimension 11 times.

The factor Evaluation of the Learning Situation was obtained in 25 of the 31 samples, and the two factors which are subsets of it, Evaluation of the French Teacher and Evaluation of the French Course were each obtained in five other samples. Why the total configuration should form two independent components in those five samples is not clear. Similarly there is no apparent



reason for the isolation of an Evaluation of the French Course factor in region M2, grade 8, when an Evaluation of the Learning Situation factor had already been identified. Nor is there a clear reason why only an Evaluation of the French Teacher factor was isolated in region B2, grade 10. Quite possibly, in some settings reactions to the learning situation are less homogeneous than in others.

The Multilingualism dimension appeared in 16 samples. The major defining features of this dimension involve more than one language spoken by the student and in the home, and there is not any other variable which consistently loads on this dimension. In six samples the variable Opportunity to Use French contributes to this dimension, suggesting possibly that in these cases "Multilingualism" implies primarily students from French-English homes, but this pattern does not characterize the other ten samples. It would seem that this dimension reflects variability which is due to non-English backgrounds in the sample.

A Semantic Differential factor emerged in 17 of the 20 samples obtained from the secondary schools. Ten of these received substantial contributions from the measure of Attitudes toward the European French (Variable 13) probably because this variable was not that highly related to other variables in the matrix but overlapped considerably with Variable 42 (European French - Evaluation) which was a major component of the Semantic Differential dimension. No other consistent pattern is evident.

Sixteen factors were classified as Not Labelled primarily because the configurations did not suggest any meaningful interpretation. Of these, seven were from monolingual regions and nine from bilingual ones. They were not particularly more frequent in either the elementary or secondary samples, and there seemed to be very little similarity in them from sample to sample.

They are best interpreted as being idiosyncratic to their respective samples and might indicate that too many factors were extracted in these samples.

#### Relationships Among The Factors

In order to determine the comparability of the factors across the different regions, further analyses were conducted. One such analysis involved all the elementary school samples, another was concerned with the secondary school samples from the monolingual regions, and the third was performed with the secondary school samples from the bilingual regions.

In each analysis, correlations were computed between the factor loadings reported in Tables A1 to A31. For example, treating the variables as subjects, we calculated the correlation of the loadings on factor I for grade 7, region M1, with those for each of factors II, III, etc., for that region as well as the loadings on every other factor for all the elementary school samples. In fact, the correlations between the loadings of all the elementary school samples were calculated. The resulting correlation matrix, therefore, treated the factors themselves as variables, and summarized the extent to which the loadings on any one factor were similar to those on any other factor. This matrix was then subjected to a factor analysis to determine the extent to which common factors existed across the various regions.

#### The Elementary School Samples

The Varimax factor matrix for the elementary school samples is presented in Table 3. The seven factors presented were all factors with eigenvalues

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 Insert Table 3 about here  
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greater than 1.0. Inspection of the matrix demonstrates that in general the factors described above were replicable across the various regions and generally quite independent of other factors from the same region.

Factor 1 receives appreciable loadings (i.e., greater than  $\pm .40$ ) from 13 "variables". Nine of these were Evaluation of the Learning Situation

factors described above, two were Evaluation of the French Teacher factors, and two were Evaluation of the French Course factors. Clearly this factor demonstrates that Evaluation of the Learning Situation is a stable and consistent factor across these two grades and these regions.

Factor II is not so clear cut. Thirteen "variables" define this factor. Although six French Achievement factors contribute to this dimension (five from monolingual areas), three labelled as French Achievement do not. Furthermore, four contributions to this dimension are from the Not Labelled factors, and three are defined as Language Aptitude. Although Factor II is tentatively defined as a French Achievement dimension which is common to six of the samples, it is clear that it shares variance in common with language aptitude and other attributes which are relatively idiosyncratic to the region concerned.

Factor III demonstrates the relative stability and consistency of the Self-Perception of French Competence dimension in that 11 of the 12 defining "variables" are identified as Self-Perception of French Competence in their samples. Only one variable was identified differently, and that was not labelled.

Factor IV is best identified as the Integrative Motive dimension in that 11 of the 15 "variables" comprising this factor are Integrative Motive factors. The remaining four represent Evaluation of the Learning Situation or Evaluation of the French Course factors. The Integrative Motive dimension is obviously stable across samples though in some samples it is related to reactions to aspects of the language learning situation.

All five of the factors referred to as Multilingualism in the elementary school analyses contribute to Factor V, and in addition loadings are also obtained from one "Not Labelled" factor and one Evaluation of the French Course

factor; these both from the same sample. In general the loadings on this factor tend to be low, indicating that the definition of the Multilingualism dimension is not that consistent across the various samples.

Factor VI is defined by 11 "variables", eight representing French Achievement factors, two characterizing Self-Perception of French Competence and one referring to Multilingualism. Only one of the French Achievement factors does not load on this factor, suggesting that this dimension reflects a relatively stable factor of French Achievement which, unlike Factor II, also identified as French Achievement, is relatively independent of language aptitude or other factors. It should be noted furthermore that, whereas Factor II included only one of the French Achievement factors from bilingual regions, Factor VI includes all those factors defined as French Achievement in bilingual areas and all but one from the monolingual areas. The emergence of these two dimensions (Factors II and VI) reflects in a cross sample situation the confounding of French achievement and language aptitude which was noted in the previous analyses as well as the somewhat different character of the French Achievement dimensions in different regions.

Factor VII is defined by only two "variables" and is not readily interpretable.

#### The Monolingual Region Secondary Schools

Table 4 presents the rotated factor matrix for the secondary school samples from the monolingual regions. In this analysis, nine factors produced

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 Insert Table 4 about here  
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eigenvalues greater than 1.0, but rotation of these nine factors produced two that were essentially unique. For this reason, only seven factors were finally rotated. The interpretation of all seven factors is very clear and

requires little elaboration.

Factor I receives appreciable loadings (i.e., greater than  $\pm.40$ ) from 14 "variables" derived from Integrative Motive factors, two from Evaluation of the French Course, and one reflecting Multilingualism (Variable 26). Obviously the Integrative Motive dimension is relatively unique and common across all the samples.

Factor II is more heterogeneous in content but is tentatively identified as Language Aptitude. The five Language Aptitude "variables" load substantially on this axis, as do five "variables" defined as French Achievement and one as Multilingualism. This dimension is clearly not unique in content emphasizing either language aptitude or French achievement components in different samples, but it is represented in all but one of the samples.

Factor III is clearly the Self-Perception of French Competence dimension being defined only by the 11 "variables" bearing this name. It is both unique and consistent.

Factor IV is the dimension of Evaluation of the Learning Situation. Nine "variables" have this label while in two regions the subsets of this factor, Evaluation of the French Teacher and French Course respectively, define this dimension. It is possibly significant that these two samples are from grade 11, pointing to the possibility that in some areas reactions to the learning situation tend to become heterogeneous as students become older.

Twelve "variables" define Factor V. Nine of them are Semantic Differential dimensions, and three were Not Labelled. Clearly the Semantic Differential dimension is both unique and consistent across samples.

Factor VI is a Multilingualism dimension; all seven "variables" defining it are Multilingualism factors. Only one Multilingualism factor does not

contribute to this dimension suggesting that, although the dimension appeared to involve different variables in the different samples, there did tend to be some consistency across most samples.

Factor VII is best identified as a French Achievement dimension since twelve "variables" reflect such achievement. As before, the dimension is not unique, however. Three "variables" involve Language Aptitude, one Self-Perceptions of French Competence, and one Semantic Differential variance.

#### The Bilingual Region - Secondary Schools

Table 5 presents the rotated factor matrix for the secondary schools in the bilingual regions. As before, seven factors were retained for rotation from the ten with eigenvalues greater than 1.0 because this seemed to best

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 Insert Table 5 about here  
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reflect the dimensionality. When ten factors were rotated, three produced essentially unique components. Even when the seven factors were rotated, however, the resulting structure is generally less clear than those presented above.

Factor I is defined by 16 "variables", 11 Integrative Motive factors which represent all nine areas, two Not Labelled factors, two Evaluation of the Learning Situation factors, and one Evaluation of the French Course factor. As before, the Integrative Motive dimension is relatively unique and common across samples.

Factor II is clearly different from any factor reported thus far and represents a mixture of eight French Achievement factors, six Self-Perception of French Competence factors, two Not Labelled, and one Multilingualism factor. Moreover the loadings differ substantially across areas. Particularly in some bilingual contexts, it appears that French Achievement and Self-

Perception of French Competence become linked more so than in other areas and even more so than monolingual regions. This pattern would be expected if the generalization made earlier were correct that considerable exposure to the other language is necessary to make self-confidence an important determinant of second language acquisition.

Factor III is clearly the Semantic Differential dimension. Of the nine "variables" contributing to this factor, eight are Semantic Differential factors, and one is Not Labelled.

Factor IV is primarily a Language Aptitude dimension. Seven "variables" describe Language Aptitude, and three reflect French Achievement. It would seem that in the bilingual regions Language Aptitude tends to be more unique than in monolingual settings and fairly consistent across samples.

Factor V, identified as the Evaluation of the Learning Situation dimension, is defined by 10 "variables", seven referring to Evaluation of the Learning Situation, two to Evaluation of the French Course, and one to the Integrative Motive. As in the other analyses, this dimension is generally unique and consistent.

Factors VI and VII are not readily interpretable. Factor VI receives substantial loadings from seven "variables", five Not Labelled, one Self-Perception of French Competence, and one Multilingualism factor. Factor VII is defined by two dimensions of French Achievement and one of Multilingualism. In both factors the loadings are relatively low.

These results with respect to the relationships among the factors are important because they demonstrate the general consistency of factor patterns across ages and language training as well as different cultural settings. Within the elementary school settings,

the factor patterns underlying Evaluation of the Learning Situation, Self-Perception of French Competence, Integrative Motive, and French Achievement are clearly articulated and consistent from age to age and region to region. This pattern is also true of secondary school students from monolingual regions. In this latter situation too there is evidence of a consistent Semantic Differential factor reflecting primarily the greater number of variables using this technique for the older students. This pattern is only partially maintained with secondary school students from bilingual regions where the Integrative Motive, Evaluation of the Learning Situation, and Semantic Differential factors demonstrate the greatest consistency across ages and regions. These latter samples show inconsistency, however, in the French Achievement and Self-Perception of French Competence dimensions which tend to merge with each other. It is as though in bilingual settings actual achievement and perceptions of competence are intermingled.

A very meaningful interpretation of these findings is that once students are old enough and have sufficient language skills, those who wish to can avail themselves of the opportunities that present themselves and establish self-confidence in their ability. If this is the case, it would suggest that Giles and Byrne (1982) need not restrict their theoretical model to minority group members learning the language of the majority group but instead link their theorizing to opportunities in the community to make use of those skills that are developed. That is, self-confidence and language achievement would appear to be associated, even among majority group members, in settings where the other language is present and students can assess their level of competence. This of course is also true of minority group members learning the majority language.



Another difference between the bilingual and monolingual regions is the clear and consistent distinctiveness of language aptitude in the bilingual regions. In bilingual regions, many opportunities exist to learn the language, and thus many factors can be involved. In such contexts, it is reasonable to expect that language aptitude would appear as a relatively replicable dimension distinct from second language achievement. In monolingual regions, on the other hand, language aptitude tends in some contexts to merge with French achievement, so much so that the patterns are relatively unstable from age to age and region to region. The difference again would seem to reflect the availability of opportunities to achieve proficiency. In monolingual regions, most language acquisition is quite likely centred in the school situation, and with such limited opportunities those with high aptitude would be expected to profit more than those with less. This is largely the prediction which follows from Carroll's (1962) model of second language acquisition.

### Conclusions

The purpose of this investigation was to examine the stability and replicability of factor structures underlying second language acquisition across a number of geographical areas and age groups. Although there were some differences in factor structure that could be attributed to age of student or type of region (i.e., monolingual vs. bilingual), the structures were extremely robust. This consistency has important implications for researchers of second language acquisition.

These findings demonstrated that a number of independent factors come into play in the second language learning process and that these are generally consistent across samples. As a result, they suggest that future studies in

this field should concentrate on a multidimensional approach in order to tap the complexities involved in this learning process. That is, the study of second language acquisition should include not only more than one type of predictor, but more than one criterion measure.

The present data also have implications for models of the acquisition process and the testing of those models. Since certain factors appear quite consistently from one data set to another, it seems imperative that they be included in any models proposed. A recent series of investigations (Gardner, Lalonde, & Pierson, 1984; Lalonde & Gardner, 1984) have used constructs comparable to many of the factors identified in this study as important aspects of the language learning process. These have been investigated as latent variables in causal models relating to achievement in the language and have been shown to be significant elements. The consistency reported here suggests strongly that such models would be applicable in many different contexts. Future research can now be directed profitably to investigating the implications of these causal models and the extent to which they can be extended to encompass other possible variables without being too concerned that the basic structure of the model would vary from one region to another.

Footnotes

1. This research was supported by grants from the Office of the Secretary of State and from the Social Sciences and Humanities Research Council.
2. Now with the Department of Psychology, London Psychiatric Hospital, London, Ontario.
3. Because of agreements with the various boards concerned, the various regions cannot be named. They were, however, drawn from across Canada.

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Table 1

Sample Sizes for each Grade Level in Each Region

Regions	Grades				
	7	8	9	10	11
M 1	201	206	182	182	181
M 2	112	80	177	148	133
M 3	X	199	X	158	155
M 4	238	219	231	204	204
B 1	X	X	126	114	73
B 2	239	204	203	230	180
B 3	124	106	72	62	84

Table 2  
 Identification of Factors Obtained in Each Sample  
 Elementary School Samples

	Grade 7					Grade 8					
	1* M1	2 M2	3 M4	4 B2	5 B3	6 M1	7 M2	8 M3	9 M4	10 B2	11 B3
Integrative Motive	I	I	III	I	III	I	I	I	III	I	III
French Achievement	V	IV	IV		IV	II	III	III		IV	IV
Self-Perception of French Competence	II	II	II	II	II	IV	IV	IV	II	II	II
Language Aptitude				IV	V		II				
Evaluation of the Learning Situation	III	III	I	III	I	III	V		I	III	
Evaluation of the French Teacher								II			V
Evaluation of the French Course							VII	V			I
Multilingualism		V	V	V	VI	V					
Semantic Differential											
Not Labelled	IV					VI	VI		IV		VI

\* These numbers refer to the Table Numbers in Appendix A.

Table 2 (continued)  
Secondary School Samples

	Grade 9						Grade 10						Grade 11							
	12 M1	13 M2	14 M4	15 B1	16 B2	17 B3	18 M1	19 M2	20 M3	21 M4	22 B1	23 B2	24 B3	25 M1	26 M2	27 M3	28 M4	29 B1	30 B2	31 B3
Integrative Motive	IV	V	I	III	I	I	V	I	I	I	III	V I	IV	I	I	I	I	I	VII III	I
French Achievement	II	VI III	IV	VI	II	II	II	VII	II	II	VI	II	II	II	II	II	III	VII	I	VIII
Self Perception of French Competence	V	II	II	II		IV	III	III	IV	VI	II		V	IV	IV	IV	II	II		II
Language Aptitude			V	IV	IV		VI	II		IV		III	VII		V			IV	IV	III
Evaluation of the Learning Situation	I	I	III	I	III	III	IV	IV	III	III	I		I		III	III		III	II	
Evaluation of the French Teacher												IV		III			IV			IV
Evaluation of the French Course														V			V			VII
Multilingualism	VI		VI		VI	VI	VII	VI	V		VII			VII	VI	V				
Semantic Differential	III	IV	VII	V	V	V	I	V		V	IV	VI		VI	VII		VI	V	V	V
Not Labelled						VII		VI		V		III VI			VI VII		VI VIII	VI	VI	VI



Table 3  
 Varimax Rotated Factor Matrix of Factors  
 from Different Elementary School Samples

	I	II	III	IV	V	VI	VII
Region M3 - Grade 8							
Integrative Motive	.11	.02	.03	.86	.25	-.23	-.01
Evaluation of the French Teacher	.94	-.04	-.12	.04	-.11	-.13	.16
French Achievement	-.12	.77	.09	.02	-.12	.51	-.16
Self-Perceptions of French Competence	-.05	.16	.95	.12	.07	-.13	.04
Evaluation of the French Course	.45	-.23	-.25	-.34	-.07	-.04	.62
Region M1 - Grade 7							
Integrative Motive	.26	.06	.15	.93	.00	-.04	-.10
Self-Perception of French Competence	-.01	-.07	.84	-.01	.38	.10	.12
Evaluation of the Learning Situation	.95	.03	.02	.14	.05	-.03	.02
Not Labelled	.28	.61	.46	.17	.19	.03	-.35
French Achievement	-.14	.75	.00	.05	-.07	.43	.27
Region M1 - Grade 8							
Integrative Motive	.20	.10	.09	.93	.07	-.05	-.15
French Achievement	-.06	.61	.24	.06	-.01	.67	.12
Evaluation of the Learning Situation	.97	-.07	-.03	.10	-.05	-.01	.01
Self-Perception of French Competence	-.02	.13	.93	.05	-.01	.15	-.17
Multilingualism	-.11	-.03	-.15	.01	.55	-.27	.45
Not Labelled	.12	.73	.25	.14	.32	-.10	.06
Region M2 - Grade 7							
Integrative Motive	.39	.01	.05	.89	.04	-.03	-.06
Self-Perception of French Competence	.15	.09	.96	.04	-.03	-.06	-.09
Evaluation of the Learning Situation	.91	.13	.10	.17	.09	-.10	-.12
French Achievement	.09	.76	.18	.02	.05	.46	-.21
Multilingualism	.12	-.14	-.14	-.28	.81	-.04	.07
Region M2 - Grade 8							
Integrative Motive	.26	-.03	.08	.92	.09	-.04	.04
Language Aptitude	-.05	.79	.19	-.09	-.08	.04	-.23
French Achievement	.05	.33	.18	-.07	-.06	.78	-.16
Self Perception of French Competence	.05	.11	.93	.19	.08	.05	.00
Evaluation of the Learning Situation	.85	.03	.10	.45	.12	.07	-.07
Not Labelled	.22	.25	.02	.26	.55	-.19	.01
Evaluation of the French Course	.16	.03	.24	.57	.42	.15	-.30

Table 3 (Continued)

	I	II	III	IV	V	VI	VII
Region M4 - Grade 7							
Evaluation of the Learning Situation	.89	.03	.15	.40	.09	-.05	-.10
Self-Perception of French Competence	.01	.08	.96	.05	-.00	.09	-.02
Integrative Motive	.16	.04	.01	.96	-.03	.16	-.02
French Achievement	.03	.81	.17	.04	.12	.30	-.02
Multilingualism	-.05	-.05	.24	.16	.79	-.10	-.04
Region M4 - Grade 8							
Evaluation of the Learning Situation	.91	-.04	.09	.32	-.07	.03	-.12
Self-Perception of French Competence	.13	.19	.72	.18	.00	.54	-.07
Integrative Motive	.23	.04	.30	.91	.10	.03	.06
Not Labelled	.14	.85	.29	.11	.28	.03	-.03
Region B3 - Grade 7							
Evaluation of the Learning Situation	.89	.03	.00	.33	-.01	.12	-.19
Self-Perception of French Competence	-.02	.20	.86	.12	.14	.17	-.17
Integrative Motive	.08	-.01	-.08	.96	-.06	-.04	.06
French Achievement	-.08	.13	.14	-.09	.07	.88	.11
Language Aptitude	-.13	.83	.11	-.02	.07	.03	-.06
Multilingualism	-.03	.10	.04	-.21	.78	.18	.13
Region B3 - Grade 8							
Evaluation of the French Course	.52	.06	.18	.60	.25	.04	-.38
Self-Perception of French Competence	-.09	.22	.85	-.09	.19	.13	-.01
Integrative Motive	.11	-.16	-.10	.85	-.19	-.02	.21
French Achievement	-.35	.15	.15	-.11	.26	.77	-.11
Evaluation of the French Teacher	.86	-.08	-.26	.14	-.09	-.02	.11
Not Labelled	-.03	.79	.09	-.03	.19	-.05	.06
Region B2 - Grade 7							
Integrative Motive	.23	.10	.08	.94	.08	-.03	-.11
Self-Perception of French Competence	-.11	.11	.85	.03	-.02	.41	.07
Evaluation of the Learning Situation	.97	.04	.04	.16	.05	-.14	-.05
Language Aptitude	.15	.79	-.08	.09	-.20	.29	.10
Multilingualism	.08	.18	.23	.08	.60	.60	-.27
Region B2 - Grade 8							
Integrative Motive	.22	.14	.14	.93	.12	-.02	-.06
Self-Perception of French Competence	.02	.29	.86	.20	.27	.09	-.10
Evaluation of the Learning Situation	.95	-.01	-.03	.23	.03	-.05	-.07
French Achievement	-.04	.59	.21	-.07	-.06	.72	.03

Table 4

Varimax Rotated Factor Matrix of Factors  
from Different Secondary School Samples in Monolingual Areas

Region M3 - Grade 10							
Integrative Motive	.92	.06	.07	.15	.09	.25	.03
French Achievement	.02	.23	.11	-.10	-.30	-.13	.87
Evaluation of the Learning Situation	-.01	-.08	-.02	.95	.14	-.01	-.14
Self-Perception of French Competence	.12	-.01	.91	.09	-.07	.07	.01
Multilingualism	.24	.44	.10	.12	.31	-.25	.06
Not Labelled	-.15	-.30	-.07	-.34	.61	-.11	-.08
Region M3 - Grade 11							
Integrative Motive	.92	.16	.02	.09	.07	.12	.07
French Achievement	-.01	.40	.15	-.09	-.15	-.07	.84
Evaluation of the Learning Situation	.11	.05	-.04	.96	.00	.05	-.10
Self-Perception of French Competence	.03	-.04	.93	.07	-.04	.02	.19
Multilingualism	.36	-.20	-.04	.14	.38	.58	-.01
Not Labelled	-.21	-.09	.00	.19	-.49	.26	-.16
Not Labelled	-.25	-.22	.07	.03	.47	-.07	-.26
Region M1 - Grade 9							
Evaluation of the Learning Situation	.01	-.08	.06	.94	.21	-.04	-.12
French Achievement	.08	.49	.29	-.08	-.11	.12	.72
Semantic Differential	.39	.31	-.20	.03	.78	-.03	-.09
Integrative Motive	.89	.12	.14	.28	-.13	.11	-.10
Self-Perception of French Competence	.08	-.01	.93	-.02	-.07	.00	.11
Multilingualism	.04	.09	.00	.04	-.06	.56	.09
Region M1 - Grade 10							
Semantic Differential	.26	.17	-.09	.08	.85	.02	-.23
French Achievement	-.15	.02	-.03	-.23	-.14	-.06	.88
Self-Perception of French Competence	.01	-.02	.90	.12	.04	.04	-.03
Evaluation of the Learning Situation	.24	-.05	.07	.93	.03	.02	-.11
Integrative Motive	.93	-.05	-.02	-.01	.11	-.13	.00
Language Aptitude	.39	.66	.31	.04	-.09	-.01	.45
Multilingualism	.57	.13	.21	.03	-.10	.60	.01

Table 4 (Continued)

Region M1 - Grade 11							
Integrative Motive	.84	.07	.08	-.02	.13	-.19	-.11
French Achievement	.13	.30	.09	.03	-.12	-.04	.84
Evaluation of the French Teacher	-.08	-.13	.05	.84	.09	-.08	-.03
Self-Perception of French Competence	.04	.07	.88	.00	-.03	.12	.27
Evaluation of the French Course	.57	.30	.04	.55	-.16	.21	.11
Semantic Differential	.39	-.01	-.10	.04	.71	-.01	.03
Multilingualism	.03	.01	-.18	.09	-.25	.69	.04
Region M2 - Grade 9							
Evaluation of the Learning Situation	.22	.02	-.02	.95	.08	.08	-.04
Self-Perception of French Competence	.10	-.02	.95	-.01	-.02	.12	.08
French Achievement	.10	.69	.04	-.07	-.02	.02	.60
Semantic Differential	.22	.11	-.09	.17	.85	-.24	-.17
Integrative Motive	.93	.07	.12	.22	.03	.21	.00
French Achievement	.02	-.41	.03	-.25	-.10	.07	.71
Region M2 - Grade 10							
Integrative Motive	.95	.02	.00	.12	.15	-.01	.10
Language Aptitude	.09	.71	-.11	-.04	-.05	-.05	.42
Self-Perception of French Competence	.17	.04	.86	.08	.06	.13	.11
Evaluation of the Learning Situation	.17	-.01	.01	.96	-.07	-.02	.05
Semantic Differential	-.04	.04	.07	.23	.80	.11	-.28
Multilingualism	.39	.06	.27	.20	-.18	.54	.25
French Achievement	-.02	-.05	-.11	.02	.08	-.13	.90
Region M2 - Grade 11							
Integrative Motive	.94	.11	.06	.03	.15	.07	-.01
French Achievement	.04	.14	.25	-.08	-.26	.08	.81
Evaluation of the Learning Situation	.22	-.06	-.02	.93	.10	.06	-.14
Self-Perception of French Competence	-.05	-.09	-.89	.03	.25	-.08	-.03
Language Aptitude	-.05	.53	.07	-.21	-.02	-.06	.65
Multilingualism	.02	-.25	.10	-.11	-.27	.62	-.19
Semantic Differential	.10	.24	-.02	.19	.66	.30	-.38

Table 4 (Continued)

## Region M4 - Grade 9

Integrative Motive	.94	.05	.06	.22	.15	.00	.03
Self-Perception of French Competence	-.03	-.04	.94	-.09	-.04	-.08	.12
Evaluation of the Learning Situation	.14	.10	.04	.95	-.02	-.01	.00
French Achievement	.06	.14	.33	.09	-.09	.09	.85
Language Aptitude	.10	.89	-.11	.09	.10	-.03	.10
Multilingualism	.01	-.09	.21	-.03	-.07	.82	.00
Semantic Differential	-.33	-.06	-.06	.13	.81	.11	-.13

## Region M4 - Grade 10

Integrative Motive	.94	.03	.09	.20	.07	.05	.00
French Achievement	.01	.00	.37	-.10	-.06	-.02	.89
Evaluation of the Learning Situation	.12	-.02	.02	.96	.01	.02	-.10
Language Aptitude	.01	.84	-.20	-.12	.11	.05	.13
Semantic Differential	.19	-.18	-.21	.08	.86	-.09	-.13
Self-Perception of French Competence	.07	-.08	.87	-.10	-.09	.16	.18

## Region M4 - Grade 11

Integrative Motive	.89	-.16	.01	-.13	.15	-.15	.04
Self-Perception of French Competence	.03	-.14	.81	-.11	.01	.14	.46
French Achievement	.05	.69	.12	-.02	-.10	-.12	.65
Evaluation of the French Teacher	.05	.14	-.17	.85	.16	-.09	-.13
Evaluation of the French Course	.74	.22	.15	.43	-.04	.24	.17
Semantic Differential	.24	.13	.14	.39	.63	.13	-.40

Table 5

## Varimax Rotated Factor Matrix of Factors

from Different Secondary School Samples in Bilingual Areas

Region B1 - Grade 9							
Evaluation of the Learning Situation	.17	-.08	.04	.00	.94	-.12	.12
Self-Perception of French Competence	-.04	.85	.01	.02	.05	-.09	-.32
Integrative Motive	.91	-.15	.03	-.03	.27	-.09	.01
Language Aptitude	-.07	.35	-.01	.88	-.14	.00	.00
Semantic Differential	.31	-.10	.84	.09	.03	-.26	.08
French Achievement	-.05	.54	-.16	-.06	.01	-.03	.52
Region B1 - Grade 10							
Evaluation of the Learning Situation	.44	-.07	.07	.03	.81	-.08	.05
Self-Perception of French Competence	.08	.93	-.12	.12	-.20	-.02	.03
Integrative Motive	.92	.17	-.06	-.03	.04	.13	.01
Semantic Differential	.04	-.23	.82	-.19	-.05	-.06	-.06
Not Labelled	-.28	-.01	.09	-.18	-.11	.70	.03
French Achievement	.00	.24	.03	.78	-.13	.11	.37
Multilingualism	.28	.26	-.11	-.34	-.06	-.22	.53
Region B1 - Grade 11							
Integrative Motive	.81	.22	-.07	.00	.35	-.14	-.15
Self-Perception of French Competence	.03	.81	.00	-.03	-.10	-.10	-.21
Evaluation of the Learning Situation	-.04	.04	.30	.01	.88	-.01	.06
Language Aptitude	-.17	-.18	-.11	.69	-.09	.12	-.30
Semantic Differential	.01	-.18	.80	-.03	.03	-.15	.15
Not Labelled	.04	-.15	-.09	-.38	-.13	.65	-.01
French Achievement	-.09	.74	.05	.41	-.06	.26	.20
Not Labelled	.43	-.21	.15	-.15	-.10	.18	.10
Region B3 - Grade 9							
Integrative Motive	.85	-.12	.08	.23	.01	.00	-.12
French Achievement	-.17	.70	.03	.23	-.19	.15	.50
Evaluation of the Learning Situation	-.06	-.13	.12	.02	.94	.06	-.05
Self-Perception of French Competence	.08	.67	-.10	-.22	.07	-.44	-.33
Semantic Differential	.08	.09	.83	.22	.06	.07	-.22
Multilingualism	-.15	.44	-.21	.14	-.17	-.08	.02
Not Labelled	-.06	.41	-.09	-.23	-.01	.44	-.34

Table 5 (Continued)

Region B3 - Grade 10							
Evaluation of the Learning Situation	.49	.12	-.09	-.07	.80	-.04	-.06
French Achievement	.07	.73	-.07	.37	.11	.09	.30
Not Labelled	-.17	-.05	.61	-.01	.39	.27	.17
Integrative Motive	.78	-.12	.27	-.06	.16	-.09	.25
Self-Perception of French Competence	-.07	.64	.01	-.13	.11	-.02	-.08
Not Labelled	-.05	-.42	.02	.11	-.05	.46	.12
Language Aptitude	-.09	-.13	.22	.66	.16	-.17	.03
Region B3 - Grade 11							
Integrative Motive	.55	.17	-.09	.22	-.16	-.29	-.14
Self-Perception of French Competence	-.06	.88	-.01	-.08	-.04	-.18	.11
Language Aptitude	-.13	-.02	-.05	.57	-.05	.13	.05
Evaluation of the French Teacher	.29	-.16	.01	-.11	.80	-.04	-.37
Semantic Differential	-.04	.08	.83	-.02	.24	.17	-.05
Not Labelled	.64	-.10	.27	.00	.06	-.34	.03
Evaluation of the French Course	.57	-.33	-.19	.05	.16	.34	.17
French Achievement	.33	.49	-.01	.41	.19	.22	-.17
Region B2 - Grade 9							
Integrative Motive	.94	.13	.05	.02	.18	-.08	-.08
French Achievement	.12	.96	-.08	.07	-.04	-.06	.18
Evaluation of the Learning Situation	-.01	.01	.22	-.01	.96	.01	-.04
Language Aptitude	.22	.06	.00	.81	.01	-.32	-.16
Semantic Differential	.21	.02	.93	-.07	.07	-.12	-.10
Multilingualism	-.26	-.33	.13	.28	-.12	.42	.03
Region B2 - Grade 10							
Integrative Motive	.71	.18	-.25	-.04	.51	-.01	-.26
French Achievement	.13	.94	-.12	.00	-.10	-.14	.13
Language Aptitude	.07	.29	-.08	.91	.07	.04	-.09
Evaluation of the French Teacher	.01	-.14	.20	.07	.87	-.16	.20
Integrative Motive II	.83	.00	.20	.07	.01	-.11	.39
Semantic Differential	.00	-.03	.82	-.09	.31	.20	-.18

Table 5 (Continued)

Region B2 - Grade 11							
French Achievement	.08	.96	-.07	.08	-.15	-.01	.17
Evaluation of the Learning Situation	.14	-.09	.14	-.05	.94	.03	-.16
Integrative Motive	.88	.03	.22	-.05	-.11	.04	.10
Language Aptitude	.11	-.12	-.21	.83	.01	-.11	.06
Semantic Differential	.06	-.21	.81	-.07	.19	-.06	.22
Not Labelled	-.01	-.05	-.10	.19	.05	.61	-.17
Integrative Motive II	.70	.14	-.10	-.09	.23	-.29	-.19



Appendix A

Table A1 Grade 7 Region M1

	I	II	III	IV	V
1. Spelling Clues	.04	-.05	-.04	.21	.33
2. Words in Sentences	-.03	.07	.07	.10	.43
3. Paired Associates	.02	-.06	.16	.22	.45
4. Need Achievement	.21	-.02	.18	.27	.32
5. Ethnocentrism	-.06	.07	.00	-.47	-.11
6. French Class Anxiety	-.00	-.21	-.17	-.55	-.14
7. French Canadian Attitudes	.81	-.02	.03	-.08	.30
8. Interest in Foreign Languages	.80	.13	.12	.11	.20
9. Instrumental	.73	.06	.11	-.19	.11
10. Integrative	.84	.08	.14	.03	.20
11. Parental Encouragement	.69	.16	.03	-.02	.11
12. Attitudes - Learning French	.81	.19	.26	.30	.10
13. Attitudes - European French	.74	.06	.08	-.17	.29
14. Motivational Intensity	.71	.24	.18	.38	.10
15. Desire	.82	.20	.22	.28	.10
16. Orientation Index	-.05	.09	-.03	.25	.05
17. Behavioural Intention	-.52	-.09	-.28	-.35	-.06
18. Opportunity to Use French	-.31	-.21	-.04	-.25	-.06
19. No. Years French Study	.07	.00	-.08	.33	.19
20. No. Languages Spoken at Home	.01	.46	.13	-.17	.03
21. No. Languages Student Speaks	-.04	.52	.06	-.02	.08
22. French Teacher - Evaluation	.31	.06	.83	.03	.12
23. French Teacher - Rapport	.20	.16	.81	-.06	.08
24. French Teacher - Comprehension	.18	.13	.80	.10	.15
25. French Teacher - Inspiration	.47	.08	.72	.11	.10
26. French Course - Evaluation	.71	.10	.44	.35	-.11
27. French Course - Difficulty	-.20	-.04	-.15	-.46	-.04
28. French Course - Utility	.68	.05	.38	.22	-.00
29. French Course - Interest	.65	.10	.43	.32	-.14
30. Self-Rating - Writing	.26	.61	.02	.16	.06
31. Self-Rating - Understanding	.10	.73	.16	.26	.12
32. Self-Rating - Reading	.32	.56	-.07	.24	.14
33. Self-Rating - Speaking	.27	.69	.11	.14	.01
34. Vocabulary - Junior	.22	.25	-.07	.25	.48
35. Sentence Comprehension	.07	.23	-.11	.02	.30
36. Sentence Understanding	.16	.02	-.03	-.02	.25
37. Paragraph Comprehension	.09	.05	.07	.06	.41
38. Gender	.08	.09	.12	.01	.38
39. Grade	.19	.25	.15	.49	.41

Table A2 Grade 7 Region M2

	I	II	III	IV	V
1. Spelling Clues	-.23	-.01	.04	.21	.11
2. Words in Sentences	.05	.11	.06	.43	-.10
3. Paired Associates	-.06	-.05	.15	.33	.08
4. Need Achievement	.30	-.01	.09	.28	.22
5. Ethnocentrism	.02	-.06	-.30	-.34	-.12
6. French Class Anxiety	.07	-.22	-.11	-.32	-.33
7. French Canadian Attitudes	.77	.01	.10	.01	.18
8. Interest in Foreign Languages	.80	.04	.14	.15	.25
9. Instrumental	.73	-.04	.10	-.06	.03
10. Integrative	.82	.07	.15	.03	.09
11. Parental Encouragement	.44	.05	-.13	-.03	-.01
12. Attitudes - Learning French	.81	.25	.28	.17	.11
13. Attitudes - European French	.71	-.05	.17	.00	.14
14. Motivational Intensity	.62	.26	.40	.29	.10
15. Desire	.79	.23	.26	.23	.12
16. Orientation Index	-.06	.02	.37	.07	.14
17. Behavioural Intention	-.61	-.27	-.12	-.33	.16
18. Opportunity to Use French	-.22	-.15	-.05	.04	-.51
19. No. Years French Study	.00	.15	-.14	.17	.16
20. No. Languages Spoken at Home	.05	.02	-.01	-.00	.45
21. No. Languages Student Speaks	.16	-.01	-.03	.27	.41
22. French Teacher - Evaluation	.43	.16	.78	.11	-.10
23. French Teacher - Rapport	.40	.09	.73	.10	-.17
24. French Teacher - Comprehension	.45	.18	.65	.06	-.20
25. French Teacher - Inspiration	.45	.06	.71	.05	.06
26. French Course - Evaluation	.68	.26	.53	.15	.14
27. French Course - Difficulty	-.09	-.22	-.37	-.14	-.32
28. French Course - Utility	.69	.24	.35	.16	.03
29. French Course - Interest	.63	.23	.55	.10	.25
30. Self-Rating - Writing	.12	.84	.14	.06	.00
31. Self-Rating - Understanding	.19	.82	.12	.03	.00
32. Self-Rating - Reading	.16	.82	.19	.18	.06
33. Self-Rating - Speaking	.08	.84	.05	.11	.15
34. Vocabulary - Junior	.01	.26	-.04	.65	-.10
35. Sentence Comprehension	.02	-.17	-.04	.37	.11
36. Sentence Understanding	.11	.09	.03	.33	-.02
37. Paragraph Comprehension	.20	.06	.11	.51	.04
38. Gender	.05	-.10	.05	-.07	.17
39. Grade	.27	.43	.13	.56	-.12

Table A3 Grade 7 Region M4

	I	II	III	IV	V
1. Spelling Clues	-.16	.12	.05	.26	.06
2. Words in Sentences	-.15	.12	.06	.36	-.08
3. Paired Associates	.05	.12	.12	.31	-.04
4. Need Achievement	.18	-.04	.11	.46	-.01
5. Ethnocentrism	-.18	.13	.17	-.40	-.10
6. French Class Anxiety	-.17	-.14	.13	-.37	-.13
7. French Canadian Attitudes	.22	.08	.76	.12	-.01
8. Interest in Foreign Languages	.25	.10	.82	.16	.13
9. Instrumental	.14	.08	.80	-.05	.02
10. Integrative	.29	.09	.81	.20	.01
11. Parental Encouragement	.22	.15	.69	.06	.10
12. Attitudes - Learning French	.47	.16	.69	.18	.14
13. Attitudes - European French	.18	.04	.73	.06	.01
14. Motivational Intensity	.53	.30	.55	.28	.20
15. Desire	.49	.22	.66	.16	.19
16. Orientation Index	.17	-.05	-.07	.30	-.01
17. Behavioural Intention	-.37	-.23	-.42	-.20	.09
18. Opportunity to Use French	-.28	-.13	-.30	-.17	-.43
19. No. Years French Study	-.09	.02	.07	.40	.15
20. No. Languages Spoken at Home	-.04	.16	.04	.03	.68
21. No. Languages Student Speaks	.00	.10	.13	-.02	.73
22. French Teacher - Evaluation	.87	.12	.27	.11	-.03
23. French Teacher - Rapport	.82	.11	.20	.03	-.04
24. French Teacher - Comprehension	.83	.07	.28	.10	-.06
25. French Teacher - Inspiration	.85	.08	.26	.03	.01
26. French Course - Evaluation	.71	.18	.55	.07	.12
27. French Course - Difficulty	-.34	-.17	-.07	-.03	-.10
28. French Course - Utility	.64	.15	.60	.10	.12
29. French Course - Interest	.71	.13	.49	.04	.14
30. Self-Rating - Writing	.14	.76	.06	.04	.13
31. Self-Rating - Understanding	.18	.74	.18	.20	.16
32. Self-Rating - Reading	.14	.82	.08	.04	.15
33. Self-Rating - Speaking	.18	.78	.16	.22	.08
34. Vocabulary - Junior	.16	.36	.38	.53	-.09
35. Sentence Comprehension	-.12	-.04	.20	.10	-.19
36. Sentence Understanding	.04	.14	.34	.38	-.09
37. Paragraph Comprehension	-.00	.27	.31	.50	-.03
38. Gender	.04	.02	.07	.27	-.03
39. Grade	.08	.38	.23	.36	-.01

Table A4 Grade 7 Region B2

	I	II	III	IV	V
1. Spelling Clues	-.02	-.03	.04	.33	.08
2. Words in Sentences	.11	.14	.07	.38	-.08
3. Paired Associates	.19	.00	.02	.37	.03
4. Need Achievement	.10	-.01	.11	.44	.02
5. Ethnocentrism	-.03	-.02	-.13	-.40	.06
6. French Class Anxiety	.04	-.12	-.16	-.03	-.29
7. French Canadian Attitudes	.78	.14	.13	.13	.07
8. Interest in Foreign Languages	.77	.21	.11	.05	.10
9. Instrumental	.75	.13	.05	-.01	-.15
10. Integrative	.85	.11	.12	.02	-.01
11. Parental Encouragement	.64	.00	.06	.12	-.05
12. Attitudes - Learning French	.82	.17	.25	.10	.19
13. Attitudes - European French	.67	.12	.14	.03	-.03
14. Motivational Intensity	.67	.17	.33	.22	.23
15. Desire	.80	.18	.25	.11	.20
16. Orientation Index	-.00	.00	.12	-.20	.16
17. Behavioural Intention	-.56	-.13	-.09	-.14	-.14
18. Opportunity to Use French	-.38	-.07	-.05	-.13	-.30
19. No. Years French Study	.13	.34	-.02	-.06	.14
20. No. Languages Spoken at Home	.14	.04	-.06	-.12	.45
21. No. Languages Student Speaks	.12	.14	.11	-.11	.49
22. French Teacher - Evaluation	.23	.06	.84	.14	.02
23. French Teacher - Rapport	.25	.02	.78	.17	.02
24. French Teacher - Comprehension	.21	.05	.70	.18	.04
25. French Teacher - Inspiration	.30	.07	.74	.01	.01
26. French Course - Evaluation	.66	.05	.54	.02	.28
27. French Course - Difficulty	-.25	-.29	-.11	.05	-.38
28. French Course - Utility	.65	.05	.39	.17	.15
29. French Course - Interest	.58	-.00	.55	.01	.28
30. Self-Rating - Writing	.12	.72	.07	.08	-.03
31. Self-Rating - Understanding	.16	.77	.10	-.02	.20
32. Self-Rating - Reading	.04	.79	.12	-.04	.04
33. Self-Rating - Speaking	.19	.67	.03	-.02	.16
34. Vocabulary - Junior	.16	.56	-.02	.35	.38
35. Sentence Comprehension	.05	.46	-.07	.28	.45
36. Sentence Understanding	.13	.43	.02	.31	.24
37. Paragraph Comprehension	.08	.40	-.06	.33	.56
38. Gender	-.17	.09	-.02	.07	.18

Table A5 Grade 7 Region B3

	I	II	III	IV	V	VI
1. Spelling Clues	.06	.10	.01	.01	.43	-.05
2. Words in Sentences	-.08	.11	.07	.12	.56	.06
3. Paired Associates	-.05	-.19	-.02	.05	.34	-.06
4. Need Achievement	-.06	.12	.03	.07	.37	.08
5. Ethnocentrism	-.06	-.09	.06	.13	-.40	-.20
6. French Class Anxiety	-.27	-.36	.10	-.02	-.12	-.19
7. French Canadian Atts.	.23	.20	.62	-.07	.01	.06
8. Interest-Foreign Lang.	.16	-.01	.66	.30	.07	.01
9. Instrumental	.05	-.07	.64	.13	-.12	-.35
10. Integrative	.26	.03	.78	.12	-.03	-.09
11. Parental Encouragement	.14	-.20	.65	.00	.05	-.01
12. Att.-Learning French	.37	.34	.57	-.16	.02	-.04
13. Att.-European French	.11	.09	.72	.10	.07	.07
14. Motivational Intensity	.46	.42	.44	-.09	.02	-.02
15. Desire	.49	.27	.57	-.12	.14	.11
16. Orientation Index	-.13	-.01	-.11	-.18	-.19	.42
17. Behavioural Intention	-.44	-.26	-.17	.03	-.04	.24
18. Opportunity-Use French	-.09	-.26	-.03	-.16	-.14	-.38
19. No. Years French Study	-.00	.31	.08	.15	.09	.23
20. No. Langs. Spoken/Home	-.03	-.00	-.05	.17	.01	.45
21. No. Langs. Speaks	.03	.03	.05	.24	.24	.51
22. Fre. Teacher-Evaluat'n	.89	-.03	.13	.10	-.03	-.01
23. Fre. Teacher-Rapport	.84	-.17	.19	.09	-.08	.04
24. Fre. Teacher-Comp.	.77	-.03	.20	.17	-.02	.00
25. Fre. Teacher-Inspir'n	.81	-.02	.08	.04	-.18	.09
26. Fre. Course-Evaluation	.76	.30	.34	.06	.15	-.06
27. Fre. Course-Difficulty	-.20	-.48	-.12	-.21	-.19	-.06
28. Fre. Course-Utility	.65	.10	.29	.24	.20	-.13
29. Fre. Course-Interest	.76	.18	.31	-.08	-.09	.04
30. S-R - Writing	.04	.70	.00	.04	.04	-.19
31. S-R - Understanding	-.05	.68	.04	.24	-.08	.26
32. S-R - Reading	-.10	.65	-.01	.22	.25	-.14
33. S-R - Speaking	.03	.79	.05	.16	.05	.20
34. Vocabulary-Junior	.23	.27	.07	.73	.12	.10
35. Sentence Comprehension	.05	.30	.06	.75	.01	.25
36. Sentence Understanding	.38	.02	-.01	.31	.10	-.11
37. Paragraph Comp.	.05	.24	.14	.74	.07	.25
38. Gender	.15	.37	.06	.42	.23	-.02
39. Grade	.12	.41	.15	.19	.45	-.06

Table A6 Grade 8 Region M1

	I	II	III	IV	V	VI
1. Spelling Clues	.16	.17	-.08	.20	-.20	.07
2. Words in Sentences	.03	.38	.04	.07	.15	.33
3. Paired Associates	.01	.38	-.01	.22	.01	.30
4. Need Achievement	.18	.10	.06	.05	-.05	.51
5. Ethnocentrism	-.16	-.32	-.09	.12	.12	-.35
6. French Class Anxiety	.11	-.21	.02	-.22	-.19	-.52
7. French Canadian Attitudes	.72	.11	.11	.04	-.16	-.09
8. Interest in Foreign Languages	.74	.23	-.01	.09	.04	.24
9. Instrumental	.66	.05	.05	.14	-.06	-.01
10. Integrative	.78	.26	.18	-.00	-.02	.03
11. Parental Encouragement	.38	.01	.05	.01	-.31	.17
12. Attitudes - Learning French	.74	.04	.30	.33	.12	.14
13. Attitudes - European French	.56	.23	.04	-.03	.09	-.01
14. Motivational Intensity	.68	-.02	.14	.28	.05	.38
15. Desire	.73	.09	.21	.25	.11	.27
16. Orientation Index	-.01	-.09	.03	-.02	.18	.26
17. Behavioural Intention	-.39	-.35	-.07	-.16	-.27	-.06
18. Opportunity to Use French	-.24	-.08	.01	-.16	.05	-.32
19. No. Years French Study	-.19	.09	-.07	.00	.29	.10
20. No. Languages Spoken at Home	.07	.14	.03	-.02	.65	.09
21. No. Languages Student Speaks	.15	.25	-.01	.08	.38	-.06
22. French Teacher - Evaluation	.18	.16	.86	.01	.02	.04
23. French Teacher - Rapport	.14	.06	.85	-.02	-.02	.23
24. French Teacher - Comprehension	.10	.15	.77	.06	-.12	.01
25. French Teacher - Inspiration	.30	-.09	.73	.03	.07	-.06
26. French Course - Evaluation	.65	-.03	.49	.28	.27	.01
27. French Course - Difficulty	-.15	-.31	-.03	-.27	-.44	-.19
28. French Course - Utility	.63	.02	.44	.17	.06	-.02
29. French Course - Interest	.54	-.13	.47	.29	.42	-.05
30. Self-Rating - Writing	.22	.22	.08	.76	.02	.03
31. Self-Rating - Understanding	.08	.23	.15	.76	.10	.23
32. Self-Rating - Reading	.18	.25	-.06	.71	-.06	.00
33. Self-Rating - Speaking	.16	.08	.03	.78	.04	.16
34. Vocabulary - Junior	.13	.65	.18	.37	.09	.06
35. Sentence Comprehension	.06	.56	-.01	.30	-.01	-.01
36. Sentence Understanding	.08	.53	.06	.06	.07	.02
37. Paragraph Comprehension	.20	.60	-.00	.20	.22	.13
38. Gender	.04	.15	.02	.21	.04	-.02
39. Grade	.15	.56	.08	.37	.18	.29

Table A7 Grade 8 Region M2

	I	II	III	IV	V	VI	VII
1. Spelling Clues	-.05	.45	.30	.10	-.11	.08	.01
2. Words in Sentences	.14	.69	.10	.02	-.15	.07	-.11
3. Paired Associates	-.07	.64	.05	.11	-.06	-.14	-.05
4. Need Achievement	.18	-.00	.10	.12	.17	.53	.10
5. Ethnocentrism	.07	-.51	.02	.00	-.09	-.25	.10
6. French Class Anxiety	.12	-.44	-.05	-.36	-.23	-.14	-.22
7. French Canadian Atts.	.81	-.01	-.01	.17	.35	.13	.01
8. Interest-Foreign Lang.	.62	-.05	.15	.09	.40	.36	.27
9. Instrumental	.69	-.00	.09	.23	.22	-.14	.27
10. Integrative	.69	-.02	-.02	.29	.43	.13	.16
11. Parental Encouragement	.51	-.22	.08	-.01	.09	.18	.16
12. Att.-Learning French	.60	.09	.06	.37	.45	.18	.31
13. Att.-European French	.81	.01	-.06	.04	.29	.09	-.02
14. Motivational Intensity	.52	.13	.13	.21	.46	.43	.24
15. Desire	.62	.11	.08	.17	.50	.31	.29
16. Orientation Index	.08	.07	-.03	.03	.15	.54	-.09
17. Behavioural Intention	-.53	-.32	-.19	-.25	-.30	-.08	-.28
18. Opportunity-Use French	-.16	.28	-.01	-.22	-.26	-.20	-.53
19. No. Years French Study	.02	-.06	.33	.23	.14	-.14	-.25
20. No. Langs. Spoken/Home	.16	-.05	-.00	.02	.02	.18	.25
21. No. Langs. Speaks	.22	.23	.16	.17	.03	.44	.26
22. Fre. Teacher-Evaluat'n	.32	-.03	.14	.09	.86	.09	-.06
23. Fre. Teacher-Rapport	.27	-.13	.03	.13	.88	.14	.03
24. Fre. Teacher-Comp.	.22	-.05	.25	.06	.77	.20	-.15
25. Fre. Teacher-Inspir'n	.42	-.12	.14	.06	.80	.15	.06
26. Fre. Course-Evaluation	.41	.08	.14	.15	.72	.17	.40
27. Fre. Course-Difficulty	-.19	-.20	-.21	-.22	-.47	.11	-.46
28. Fre. Course-Utility	.45	.14	.18	.19	.58	.08	.40
29. Fre. Course-Interest	.50	-.01	.13	.19	.59	.22	.43
30. S-R - Writing	.15	.18	.01	.72	.08	.15	.10
31. S-R - Understanding	.25	.14	.23	.74	.11	-.04	.12
32. S-R - Reading	.17	.13	.10	.67	.19	.06	-.02
33. S-R - Speaking	.10	-.04	.26	.72	.03	.11	.03
34. Vocabulary-Junior	.12	.22	.74	.26	.23	.04	-.06
35. Sentence Comprehension	.06	-.15	.57	.20	.03	.16	.13
36. Sentence Understanding	.01	.19	.66	.01	.07	.01	-.04
37. Paragraph Comp.	.02	.21	.75	.06	.18	.03	.03
38. Gender	.16	-.07	-.06	-.01	-.05	-.09	.41
39. Grade	.11	.58	.43	.28	.11	-.06	.09



Table A8 Grade 8 Region M3

	I	II	III	IV	V
1. Spelling Clues	-.10	.01	.36	.11	-.16
2. Words in Sentences	-.01	-.08	.54	.01	.00
3. Paired Associates	.08	.02	.51	.13	.09
4. Need Achievement	.35	.16	.28	.07	.18
5. Ethnocentrism	-.20	-.14	-.28	-.02	-.12
6. French Class Anxiety	.07	.00	-.30	-.30	-.29
7. French Canadian Attitudes	.76	.22	-.02	.14	-.14
8. Interest in Foreign Languages	.79	.08	.11	.14	-.04
9. Instrumental	.71	.07	.10	.08	-.01
10. Integrative	.85	.10	.10	.06	.10
11. Parental Encouragement	.61	.07	.20	.12	-.10
12. Attitudes - Learning French	.80	.20	.11	.14	.33
13. Attitudes - European French	.70	.16	-.10	.09	-.11
14. Motivational Intensity	.62	.12	.18	.32	.41
15. Desire	.75	.10	.11	.25	.39
16. Orientation Index	.20	.10	-.04	.08	.04
17. Behavioural Intention	-.42	.02	-.36	-.22	-.25
18. Opportunity to Use French	-.27	.17	.05	-.29	-.06
19. No. Years French Study	.15	-.10	.25	.12	.05
20. No. Languages Spoken at Home	.15	.01	-.04	-.01	-.34
21. No. Languages Student Speaks	.28	-.18	.06	.14	.00
22. French Teacher - Evaluation	.21	.91	-.03	.03	.08
23. French Teacher - Rapport	.12	.87	-.09	.01	.10
24. French Teacher - Comprehension	.14	.87	.04	-.01	-.04
25. French Teacher - Inspiration	.29	.78	-.08	-.07	.16
26. French Course - Evaluation	.57	.31	.05	.13	.61
27. French Course - Difficulty	-.15	-.03	-.29	-.20	-.47
28. French Course - Utility	.59	.27	.19	.10	.49
29. French Course - Interest	.51	.36	-.03	.05	.63
30. Self-Rating - Writing	.24	.05	-.02	.75	.09
31. Self-Rating - Understanding	.23	.00	.13	.78	.02
32. Self-Rating - Reading	.22	-.06	.03	.79	.04
33. Self-Rating - Speaking	.16	.01	.05	.81	.08
34. Vocabulary - Junior	.01	-.02	.56	.20	.08
35. Sentence Comprehension	.02	-.06	.34	-.11	-.01
36. Sentence Understanding	.05	.01	.54	-.08	.03
37. Paragraph Comprehension	.07	-.09	.56	-.09	.14
38. Gender	.11	.22	.30	-.01	.06
39. Grade	.14	.17	.56	.48	.17

Table A9 Grade 8 Region M4

	I	II	III	IV
1. Spelling Clues	-.15	-.16	-.03	.22
2. Words in Sentences	.09	.28	.10	.34
3. Paired Associates	.04	.19	.12	.43
4. Need Achievement	.09	.02	.15	.42
5. Ethnocentrism	.02	.02	.04	-.53
6. French Class Anxiety	-.02	-.09	-.01	-.53
7. French Canadian Attitudes	.09	.10	.78	.23
8. Interest in Foreign Languages	.24	.22	.80	.11
9. Instrumental	.18	.23	.80	-.15
10. Integrative	.21	.10	.85	.12
11. Parental Encouragement	.12	.18	.69	-.04
12. Attitudes - Learning French	.35	.27	.76	.19
13. Attitudes - European French	.19	.08	.73	.07
14. Motivational Intensity	.46	.23	.64	.26
15. Desire	.40	.27	.74	.20
16. Orientation Index	-.10	-.15	.06	.09
17. Behavioural Intention	-.23	-.37	-.51	-.12
18. Opportunity to Use French	-.15	-.27	-.47	-.17
19. No. Years French Study	-.20	.14	.11	.05
20. No. Languages Spoken at Home	-.14	.13	.17	.13
21. No. Languages Student Speaks	.00	.17	.16	.22
22. French Teacher - Evaluation	.83	.18	.34	.16
23. French Teacher - Rapport	.80	.19	.34	.00
24. French Teacher - Comprehension	.78	.19	.30	.06
25. French Teacher - Inspiration	.82	.17	.37	.01
26. French Course - Evaluation	.70	.33	.51	.07
27. French Course - Difficulty	-.14	-.40	-.31	-.28
28. French Course - Utility	.59	.34	.56	.13
29. French Course - Interest	.71	.24	.48	.07
30. Self-Rating - Writing	.18	.61	.44	.05
31. Self-Rating - Understanding	.14	.66	.35	.20
32. Self-Rating - Reading	.08	.60	.46	.18
33. Self-Rating - Speaking	.15	.63	.38	.17
34. Vocabulary - Junior	.24	.63	.27	.28
35. Sentence Comprehension	.02	.43	.09	-.05
36. Sentence Understanding	.23	.48	.05	.19
37. Paragraph Comp. +ension	-.05	.52	.24	.11
38. Gender	.13	.49	.03	.04
39. Grade	.07	.41	.14	.47

Table A10 Grade 8 Region BC

	I	II	III	IV
1. Spelling Clues	-.14	.21	.00	.29
2. Words in Sentences	.02	.07	.09	.37
3. paired Associates	.09	.06	.14	.54
4. Need Achievement	.24	.26	.07	.03
5. Ethnocentrism	-.13	-.31	.01	-.32
6. French Class Anxiety	-.24	-.44	-.04	-.11
7. French Canadian Attitudes	.76	.04	.19	.18
8. Interest in Foreign Languages	.75	.20	.23	.09
9. Instrumental	.69	.13	.12	.08
10. Integrative	.80	.08	.23	.04
11. Parental Encouragement	.67	.12	-.05	.02
12. Attitudes - Learning French	.77	.30	.41	.13
13. Attitudes - European French	.71	.01	.18	.10
14. Motivational Intensity	.62	.45	.32	.09
15. Desire	.73	.33	.25	.11
16. Orientation Index	.14	.11	.04	.04
17. Behavioural Intention	-.39	-.29	-.13	-.15
18. Opportunity to Use French	-.29	-.34	-.12	-.07
19. No. Years French Study	.02	.22	-.06	.25
20. No. Languages Spoken at Home	-.01	.21	-.02	.05
21. No. Languages Student Speaks	.19	.17	.18	.08
22. French Teacher - Evaluation	.23	-.03	.86	.13
23. French Teacher - Rapport	.24	-.08	.81	.05
24. French Teacher - Comprehension	.14	-.00	.80	.18
25. French Teacher - Inspiration	.27	.10	.81	.04
26. French Course - Evaluation	.62	.25	.60	.09
27. French Course - Difficulty	-.19	-.47	-.07	-.14
28. French Course - Utility	.57	.16	.51	.13
29. French Course - Interest	.52	.26	.58	.01
30. Self-Rating - Writing	.16	.73	.09	.16
31. Self-Rating - Understanding	.24	.65	.04	.32
32. Self-Rating - Reading	.13	.80	.03	.20
33. Self-Rating - Speaking	.22	.75	.03	.22
34. Vocabulary - Junior	.23	.33	.03	.74
35. Sentence Comprehension	.08	.27	.01	.61
36. Sentence Understanding	.10	-.02	.12	.49
37. Paragraph Comprehension	.18	.21	-.06	.75
38. Gender	.03	.11	.08	.41

Table A11 Grade 8 Region B3

	I	II	III	IV	V	VI
1. Spelling Clues	.02	.07	-.11	.09	-.11	.26
2. Words in Sentences	-.17	.07	.04	.16	.13	.43
3. Paired Associates	-.15	.11	-.02	.35	-.16	.28
4. Need Achievement	.08	.04	.07	.02	-.01	.47
5. Ethnocentrism	-.17	.01	.26	.19	-.02	-.54
6. French Class Anxiety	-.01	-.62	.30	.13	-.01	-.10
7. French Canadian Atts.	.25	.09	.74	-.05	.09	.02
8. Interest-Foreign Lang.	.54	-.05	.26	.24	.05	.20
9. Instrumental	.09	-.17	.71	.11	.11	-.13
10. Integrative	.29	-.12	.67	.12	.22	.07
11. Parental Encouragement	.14	-.09	.80	-.09	.15	-.13
12. Att.-Learning French	.65	.15	.54	.02	.21	-.11
13. Att.-European French	.27	-.12	.43	.09	.18	.18
14. Motivational Intensity	.55	.35	.33	.15	-.03	.05
15. Desire	.70	.34	.40	.08	.03	.03
16. Orientation Index	.20	.04	-.34	.01	.05	.07
17. Behavioural Intention	-.20	-.22	-.45	.01	-.14	.04
18. Opportunity-Use French	-.26	-.39	-.18	-.14	.07	-.19
19. No. Years French Study	-.10	.53	.05	.13	.12	-.19
20. No. Langs. Spoken/Home	.18	.09	-.14	.37	-.11	.26
21. No. Langs. Speaks	-.00	.16	.11	.47	.04	-.02
22. Fre. Teacher-Evaluat'n	.37	-.03	.27	-.03	.77	.08
23. Fre. Teacher-Rapport	.19	-.06	.09	-.11	.81	.09
24. Fre. Teacher-Comp.	.21	-.08	.30	-.12	.69	-.13
25. Fre. Teacher-Inspir'n	.55	-.02	.18	-.04	.55	-.21
26. Fre. Course-Evaluation	.81	-.05	.13	.12	.33	.08
27. Fre. Course-Difficulty	-.54	-.28	.06	.01	-.11	-.16
28. Fre. Course-Utility	.48	-.13	.36	.04	.32	.30
29. Fre. Course-Interest	.76	.01	.08	.11	.24	-.11
30. S-R - Writing	.11	.74	-.04	.11	-.23	.02
31. S-R - Understanding	.10	.72	-.01	.27	-.27	.14
32. S-R - Reading	.17	.79	.01	.18	-.04	.16
33. S-R - Speaking	.12	.78	-.04	.20	-.05	.04
34. Vocabulary-Junior	.31	.19	-.08	.65	-.19	.02
35. Sentence Comprehension	.04	.16	.17	.76	.01	-.01
36. Sentence Understanding	-.02	.20	-.11	.15	.12	.15
37. Paragraph Comp.	.22	.14	-.05	.77	-.10	.10
38. Gender	-.12	.56	-.02	.42	.16	.21
39. Grade	.27	.39	-.03	.34	.09	.47

Table A12 Grade 9 Region M1

	I	II	III	IV	V	VI
1. Spelling Clues	.08	.59	.05	.04	.05	-.02
2. Words in Sentences	-.14	.46	.20	.21	-.02	-.03
3. Paired Associates	-.06	.46	.03	.14	-.01	-.04
4. Need Achievement	.09	.18	.33	.05	.06	-.24
5. Ethnocentrism	.02	-.31	-.39	-.04	.03	-.12
6. French Class Anxiety	-.01	-.52	-.12	-.06	-.34	-.05
7. French Canadian Atts.	.04	.03	.58	.52	-.00	.11
8. Interest-Foreign Lang.	.11	.18	.33	.72	.25	.04
9. Instrumental	-.01	-.00	-.05	.53	.20	-.30
10. Integrative	.14	.11	.32	.72	.13	-.06
11. Parental Encouragement	.05	-.01	.15	.41	.02	-.34
12. Att.-Learning French	.15	.22	.15	.82	.18	.03
13. Att.-European French	.13	-.11	.67	.25	-.00	.06
14. Motivational Intensity	.20	.17	.23	.71	.20	.22
15. Desire	.16	.10	.22	.79	.18	.22
16. Orientation Index	-.05	.20	.28	.18	-.16	.40
17. Behavioural Intention	-.04	-.36	.09	-.29	-.09	.20
18. Opportunity-Use French	-.08	-.21	-.09	-.25	-.19	-.18
19. No. Years French Study	-.03	.18	.05	-.06	.34	-.07
20. No. Langs. Spoken/Home	-.01	.04	.14	.06	.06	.53
21. No. Langs. Speaks	-.08	.29	-.10	.21	.19	.40
22. Fre. Teacher-Evaluat'n	.82	.05	.16	.16	.11	-.03
23. Fre. Teacher-Rapport	.71	.04	.19	.15	.09	-.03
24. Fre. Teacher-Comp.	.75	.07	.13	.14	.09	.05
25. Fre. Teacher-Inspir'n	.78	-.09	-.01	.31	.11	.01
26. Fre. Course-Evaluation	.49	.05	.01	.74	.04	.22
27. Fre. Course-Difficulty	.02	-.58	-.02	-.18	-.23	-.01
28. Fre. Course-Utility	.41	.13	.14	.70	-.00	.03
29. Fre. Course-Interest	.52	-.12	-.05	.66	-.03	.24
30. S-R - Writing	.18	.14	-.06	.24	.66	-.00
31. S-R - Understanding	.09	.22	-.12	.20	.75	.10
32. S-R - Reading	.15	.12	-.05	.13	.68	.08
33. S-R - Speaking	.09	.16	-.02	.20	.81	-.04
34. CATF - Vocabulary	-.02	.57	-.15	.03	.08	.12
35. CATF - Grammar	.01	.51	.03	-.10	.08	.12
36. CATF - Comp.	.12	.30	-.07	-.15	.07	-.03
37. Aural Paragraph Comp.	.06	.33	-.04	-.03	.02	.12
38. Aural Sentence Complet'n	.01	.36	.11	.15	.18	.03
39. Grade	-.01	.62	.04	.19	.29	-.06
40. Fre. Canadian-Evaluat'n	.20	.01	.70	.20	-.07	.12
41. Myself - Evaluation	.47	.09	.21	.11	.16	-.25
42. European Fre.-Evaluat'n	.33	-.08	.69	.11	-.03	.07
43. Eng. Canadian-Evaluat'n	.44	-.11	.44	.06	-.07	-.16

Table A13 Grade 9 Region MC

	I	II	III	IV	V	VI
1. Spelling Clues	-.07	.06	.38	-.01	-.04	.08
2. Words in Sentences	-.06	-.05	.61	.05	.05	-.01
3. Paired Associates	.05	-.07	.61	.11	.11	.11
4. Need Achievement	.14	.16	.25	.22	.30	-.13
5. Ethnocentrism	.04	.16	-.47	-.08	-.07	.17
6. French Class Anxiety	-.01	-.37	-.35	-.04	-.09	.05
7. French Canadian Atts.	.10	-.05	.06	.50	.60	.23
8. Interest-Foreign Lang.	.09	.16	.30	.18	.77	.00
9. Instrumental	.21	.10	.01	.16	.50	.28
10. Integrative	.10	.08	.03	.33	.73	.06
11. Parental Encouragement	-.01	.13	-.04	.09	.54	.18
12. Att.-Learning French	.45	.22	.19	.04	.74	.03
13. Att.-European French	.19	-.02	.12	.56	.45	.07
14. Motivational Intensity	.36	.24	.18	.16	.70	-.12
15. Desire	.32	.13	.20	.15	.77	-.12
16. Orientation Index	-.00	.08	.22	.26	.24	-.23
17. Behavioural Intention	-.25	-.19	-.23	.18	-.45	-.11
18. Opportunity-Use French	-.05	-.15	-.12	-.14	-.39	-.13
19. No. Years French Study	-.19	.27	.04	.01	.09	.24
20. No. Langs. Spoken/Home	.03	.13	-.03	-.25	.26	.25
21. No. Langs. Speaks	.10	.13	-.02	-.20	.36	.31
22. Fre. Teacher-Evaluat'n	.88	.05	-.05	.18	.13	.02
23. Fre. Teacher-Rapport	.81	-.01	-.09	.24	.17	-.02
24. Fre. Teacher-Comp.	.72	-.02	.07	.25	.20	.07
25. Fre. Teacher-Inspir'n	.75	-.00	.02	.17	.30	.01
26. Fre. Course-Evaluation	.67	.18	.11	.06	.62	-.02
27. Fre. Course-Difficulty	-.18	-.33	-.17	.11	-.08	-.12
28. Fre. Course-Utility	.40	.22	.09	.10	.70	-.01
29. Fre. Course-Interest	.66	.11	.04	.05	.58	-.09
30. S-R - Writing	.07	.59	.16	.18	.21	.00
31. S-R - Understanding	.08	.79	-.14	-.02	.17	.14
32. S-R - Reading	-.05	.68	.04	.02	.17	.02
33. S-R - Speaking	.06	.79	-.07	.07	.15	.15
34. CATF - Vocabulary	-.04	.27	.54	-.10	.08	.51
35. CATF - Grammar	.09	.11	.50	-.04	.15	.28
36. CATF - Comp.	-.00	.09	.25	.02	.04	.39
37. Aural Paragraph Comp.	-.01	.05	.10	.03	.08	.54
38. Aural Sent Complet'n	.08	.08	.45	.19	.18	.23
39. Grade	.29	.22	.62	-.02	.16	.06
40. French Can-Evaluat'n	.76	-.09	-.05	.73	.35	.11
41. Myself - Evaluation	.32	.27	.25	.39	.17	-.26
42. Europe Fre.-Evaluat'n	.40	.09	.02	.73	.21	.01
43. Eng. Can-Evaluat'n	.25	.18	.16	.69	.10	-.13

Table A14 Grade 9 Region M4

	I	II	III	IV	V	VI	VII
1. Spelling Clues	.01	-.01	.01	.25	.36	-.15	.00
2. Words in Sentences	.12	.10	.06	.31	.42	-.18	-.07
3. Paired Associates	.00	-.05	.03	.09	.40	-.06	.01
4. Need Achievement	.25	.19	.19	.03	.54	-.03	-.00
5. Ethnocentrism	-.17	.03	-.08	.09	-.58	-.08	.04
6. French Class Anxiety	-.20	-.24	-.03	-.36	-.28	-.03	.01
7. French Canadian Atts.	.84	.02	.05	.03	.11	-.02	.12
8. Interest-Foreign Lang.	.78	.16	.21	.02	.13	.10	.03
9. Instrumental	.73	.13	-.00	-.02	-.18	-.08	-.20
10. Integrative	.85	.13	.05	.03	.05	-.04	.01
11. Parental Encouragement	.49	.09	-.10	-.02	.06	-.14	.10
12. Att.-Learning French	.81	.04	.36	.20	.09	.06	-.04
13. Att.-European French	.75	.10	.06	-.03	.12	-.18	.21
14. Motivational Intensity	.64	.18	.35	.25	.18	.13	-.04
15. Desire	.79	.07	.25	.30	.03	.09	-.05
16. Orientation Index	-.06	-.21	.07	-.01	.39	.15	.03
17. Behavioural Intention	-.49	-.05	-.26	-.41	.03	-.06	.18
18. Opportunity-Use French	-.38	-.06	.03	-.04	.01	-.25	.06
19. No. Years French Study	.07	.17	.03	.23	-.25	.08	-.01
20. No. Langs. Spoken/Home	-.03	.13	-.03	-.07	-.02	.70	.12
21. No. Langs. Speaks	.01	.09	.01	.19	-.09	.68	.10
22. Fre. Teacher-Evaluat'n	.14	.16	.85	.12	.09	-.07	.20
23. Fre. Teacher-Rapport	.15	.03	.82	.20	.08	-.01	.20
24. Fre. Teacher-Comp.	.11	.09	.81	.02	.14	-.12	.17
25. Fre. Teacher-Inspir'n	.34	.03	.72	.04	.10	.10	.07
26. Fre. Course-Evaluation	.65	-.01	.60	.22	.06	.09	-.06
27. Fre. Course-Difficulty	-.30	-.09	-.20	-.51	-.11	-.06	.10
28. Fre. Course-Utility	.66	.08	.47	.16	.00	.09	-.09
29. Fre. Course-Interest	.64	-.01	.53	.14	.04	.06	-.07
30. S-R - Writing	.13	.75	.02	.25	.08	.05	.03
31. S-R - Understanding	.14	.67	.05	.32	-.06	.05	-.07
32. S-R - Reading	.09	.77	.11	.16	-.03	.12	.14
33. S-R - Speaking	.15	.76	.12	.19	-.17	.08	.05
34. CATF - Vocabulary	.01	.12	.05	.64	.08	.05	.06
35. CATF - Grammar	-.02	.19	.10	.67	-.04	-.01	.14
36. CATF - Comp.	.07	-.12	-.12	.50	.17	.11	.15
37. Aural Paragraph Comp.	.05	.20	.06	.56	-.11	-.05	-.10
38. Aural Sent Complet'n	.04	.21	.14	.65	-.02	-.00	.03
39. Grade	.19	.20	.09	.64	.32	.05	-.04
40. French Can-Evaluat'n	.48	-.06	.14	.23	.14	.02	.38
41. Myself - Evaluation	-.03	.07	.29	.00	.08	.21	.59
42. Europe Fre.-Evaluat'n	.58	-.01	.10	.00	.12	-.25	.45
43. Eng. Can-Evaluat'n	.01	.08	.15	.04	-.18	.10	.63

Table A15 Grade 9 Region B1

	I	II	III	IV	V	VI
1. Spelling Clues	-.07	.09	.00	.57	.02	-.06
2. Words in Sentences	-.00	-.09	.08	.64	.09	-.05
3. Paired Associates	-.01	.05	.13	.50	.14	.14
4. Need Achievement	.22	.07	.30	.15	.18	-.40
5. Ethnocentrism	-.03	-.16	-.10	-.24	-.15	.13
6. French Class Anxiety	-.11	-.56	-.04	-.14	-.05	-.02
7. French Canadian Atts.	.11	-.27	.68	.09	.34	.07
8. Interest-Foreign Lang.	.19	-.09	.72	.13	.28	-.12
9. Instrumental	.01	.05	.76	.04	-.07	.04
10. Integrative	.12	-.02	.71	-.11	.24	.05
11. Parental Encouragement	.12	-.05	.60	.11	-.05	.03
12. Att.-Learning French	.24	.19	.83	.00	.19	.06
13. Att.-European French	.13	-.20	.62	.01	.39	.03
14. Motivational Intensity	.40	.02	.65	.03	.27	-.07
15. Desire	.29	.20	.72	.13	.31	.06
16. Orientation Index	.07	-.22	.32	-.04	.21	.15
17. Behavioural Intention	-.15	-.25	-.54	-.22	.05	-.05
18. Opportunity-Use French	-.16	-.15	-.28	.02	-.03	-.47
19. No. Years French Study	-.06	.43	.07	.21	.09	.29
20. No. Langs. Spoken/Home	.08	-.06	.25	-.07	-.03	.32
21. No. Langs. Speaks	.17	.39	.14	.06	-.01	.20
22. Fre. Teacher-Evaluat'n	.84	.04	.22	.05	.19	.13
23. Fre. Teacher-Rapport	.80	.03	.21	.02	.10	.13
24. Fre. Teacher-Comp.	.80	.01	.25	.04	.08	-.04
25. Fre. Teacher-Inspir'n	.73	-.14	.29	-.08	.03	.13
26. Fre. Course-Evaluation	.60	.24	.59	-.05	.12	.00
27. Fre. Course-Difficulty	-.06	-.50	-.02	-.31	-.14	-.05
28. Fre. Course-Utility	.42	.22	.67	.02	.03	.06
29. Fre. Course-Interest	.56	.10	.58	-.02	-.01	.04
30. S-R - Writing	-.01	.69	.02	.15	-.05	-.09
31. S-R - Understanding	-.08	.75	.02	.03	.02	.26
32. S-R - Reading	-.03	.70	-.10	-.03	-.05	-.06
33. S-R - Speaking	.01	.81	.01	.08	.01	.21
34. CATF - Vocabulary	-.11	.30	-.08	.54	-.04	.45
35. CATF - Grammar	.07	.15	-.10	.49	-.06	.45
36. CATF - Comp.	.07	.17	-.04	.47	-.05	-.01
37. Aural Paragraph Comp.	.20	.16	.06	.15	.09	.37
38. Aural Sent Complet'n	.07	.29	-.05	.16	.12	.52
39. Grade	.12	.32	.19	.57	.12	.23
40. French Can-Evaluat'n	.10	-.14	.28	.11	.76	.04
41. Myself - Evaluation	.29	.28	.17	.11	.41	-.25
42. Europe Fre.-Evaluat'n	.06	-.01	.30	.02	.82	.05
43. Eng. Can-Evaluat'n	.13	.28	.04	.17	.55	.06



Table A16 Grade 9 Region B2

	I	II	III	IV	V	VI
1. Spelling Clues	-.01	.11	.09	.48	-.01	-.11
2. Words in Sentences	.08	.09	.09	.49	-.10	.18
3. Paired Associates	.09	.09	-.05	.59	-.00	.01
4. Need Achievement	.22	.02	.06	.31	.12	.13
5. Ethnocentrism	-.23	.05	.01	-.50	-.14	.06
6. French Class Anxiety	-.06	-.37	-.01	-.33	-.06	.34
7. French Canadian Atts.	.57	.20	.02	.28	.38	-.17
8. Interest-Foreign Lang.	.79	.20	.11	.16	.08	.03
9. Instrumental	.61	.15	.02	-.09	.05	.10
10. Integrative	.71	.20	.06	.07	.09	-.01
11. Parental Encouragement	.65	.16	.08	-.01	.01	.15
12. Att.-Learning French	.75	.37	.20	.19	.08	-.21
13. Att.-European French	.53	.24	.06	.23	.41	-.06
14. Motivational Intensity	.62	.23	.33	.19	.08	-.14
15. Desire	.72	.5	.21	.14	.08	-.18
16. Orientation Index	.37	-.03	.01	.11	.10	-.02
17. Behavioural Intention	-.47	-.17	.00	-.07	-.04	-.35
18. Opportunity-Use French	-.24	-.46	-.01	.09	-.06	.37
19. No. Years French Study	.07	.48	.02	.02	.09	-.06
20. No. Langs. Spoken/Home	.03	.35	.12	-.17	-.09	-.32
21. No. Langs. Speaks	.14	.54	.06	.03	.05	-.35
22. Fre. Teacher-Evaluat'n	.10	.14	.85	.07	.18	-.00
23. Fre. Teacher-Rapport	.14	.11	.82	-.02	.04	.00
24. Fre. Teacher-Comp.	-.01	.11	.81	.14	.20	-.05
25. Fre. Teacher-Inspir'n	.18	.09	.78	-.02	.04	.04
26. Fre. Course-Evaluation	.64	.24	.56	.09	.09	-.18
27. Fre. Course-Difficulty	-.28	-.57	-.15	-.21	.01	.17
28. Fre. Course-Utility	.60	.13	.53	.13	.13	-.10
29. Fre. Course-Interest	.61	.18	.59	.05	.05	-.19
30. S-R - Writing	.15	.73	.14	.07	.13	-.09
31. S-R - Understanding	.25	.79	.09	-.01	.10	-.19
32. S-R - Reading	.24	.70	.14	.05	.15	.01
33. S-R - Speaking	.24	.81	.06	-.05	.11	-.10
34. CATF - Vocabulary	.10	.81	.08	.17	-.07	.12
35. CATF - Grammar	.12	.74	.11	.10	.05	.05
36. CATF - Comp.	.10	.63	.05	.25	-.01	.18
37. Aural Paragraph Comp.	.17	.71	.08	.03	-.00	-.02
38. Aural Sentence Complet'n	.04	.79	.03	.05	-.08	.13
40. Fre. Canadian-Evaluat'n	.33	.17	.29	.03	.66	-.16
41. Myself - Evaluation	.11	.14	.46	.05	.46	.33
42. European Fre.-Evaluat'n	.40	.14	.23	.06	.67	-.03
43. Eng. Canadian-Evaluat'n	.07	-.11	.40	-.14	.52	.31

Table A17 Grade 9 Region B3

	I	II	III	IV	V	VI	VII
1. Spelling Clues	.10	-.27	-.14	.11	.35	.19	.08
2. Words in Sentences	.30	.05	.02	-.02	.16	.25	-.03
3. Paired Associates	.46	-.13	.21	-.05	.04	.23	.15
4. Need Achievement	.39	.06	.03	.08	.24	.06	.43
5. Ethnocentrism	-.20	.03	-.09	-.08	.02	.04	-.32
6. French Class Anxiety	.16	-.04	-.10	-.38	-.32	-.20	.03
7. French Canadian Atts.	.63	.04	-.08	-.01	.38	-.11	.06
8. Interest-Foreign Lang.	.67	.26	.05	-.02	-.01	-.03	-.02
9. Instrumental	.45	-.06	-.00	-.17	.15	.17	-.09
10. Integrative	.76	-.04	.11	-.20	-.01	-.01	.03
11. Parental Encouragement	.59	.02	.10	-.17	.17	.12	.14
12. Att.-Learning French	.77	-.06	-.02	.34	.13	-.16	-.10
13. Att.-European French	.50	.29	.08	-.03	.28	.09	.04
14. Motivational Intensity	.63	.03	.06	.46	.06	.05	.07
15. Desire	.73	.07	.19	.26	.11	-.11	.00
16. Orientation Index	-.18	-.05	-.05	.00	-.38	-.29	.14
18. Opportunity-Use French	.04	-.04	.02	-.52	.06	-.22	-.08
19. No. Years French Study	-.06	.32	-.16	.25	.04	.37	-.01
20. No. Langs. Spoken/Home	.02	.23	-.12	.11	-.12	.44	-.01
21. No. Langs. Speaks	.01	.22	.06	.19	-.07	.64	-.00
22. Fre. Teacher-Evaluat'n	.06	.01	.86	-.08	.26	-.06	.05
23. Fre. Teacher-Rapport	-.05	.08	.78	-.07	.09	.12	.18
24. Fre. Teacher-Comp.	.16	.15	.74	-.16	.22	-.04	-.11
25. Fre. Teacher-Inspir'n	.03	-.00	.73	.22	-.10	-.05	.10
26. Fre. Course-Evaluation	.41	-.24	.60	.37	.12	-.21	-.10
27. Fre. Course-Difficulty	-.26	-.50	-.04	-.01	-.32	-.15	.05
28. Fre. Course-Utility	.41	-.15	.61	-.08	.13	.03	-.36
29. Fre. Course-Interest	.22	-.29	.48	.54	-.08	.01	.03
30. S-R - Writing	.24	.26	.03	.36	.11	.29	-.60
31. S-R - Understanding	-.02	.40	-.07	.76	.16	-.01	-.11
32. S-R - Reading	.13	.31	.03	.51	.20	.39	-.44
33. S-R - Speaking	-.05	.07	-.04	.86	.01	.05	.01
34. CATF - Vocabulary	.06	.72	-.02	.25	.06	.19	-.05
35. CATF - Grammar	.11	.70	.14	.12	.05	-.01	-.28
36. CATF - Comp.	-.06	.62	.05	-.03	-.04	.17	-.09
37. Aural Paragraph Comp.	.06	.76	-.08	-.12	.12	.17	.09
38. Aural Sent Complet'n	-.06	.67	-.02	.12	-.16	-.06	.12
39. Grade	.34	.54	-.01	.20	.17	.31	.08
40. French Can-Evaluat'n	.27	-.08	-.05	.02	.59	-.19	.01
41. Myself - Evaluation	.26	.07	.32	-.01	.69	-.07	-.09
42. Europe Fre.-Evaluat'n	.36	.13	.15	.14	.67	.00	.16
43. Eng. Can-Evaluat'n	-.01	.13	.37	.01	.75	-.07	-.06

Table A18 Grade 10 Region M1

	I	II	III	IV	V	VI	VII
1. Spelling Clues	-.03	.31	-.06	-.06	-.05	.30	.11
2. Words in Sentences	.02	.23	-.04	-.07	-.01	.49	-.10
3. Paired Associates	.00	.26	.00	-.01	.14	.43	-.07
4. Need Achievement	.18	-.00	-.11	.15	.15	.24	.35
5. Ethnocentrism	-.07	-.05	-.02	.17	-.27	-.45	.01
6. French Class Anxiety	-.02	.00	-.28	-.10	.04	-.60	.01
7. French Canadian Atts.	.50	.10	.03	.07	.64	.16	.05
8. Interest-Foreign Lang.	.32	.11	-.11	.24	.43	.33	.41
9. Instrumental	.04	.06	.03	.14	.66	-.02	.08
10. Integrative	.29	.17	.06	.13	.72	.14	.15
11. Parental Encouragement	.06	-.01	.07	.02	.58	-.02	.04
12. Att.-Learning French	.20	.07	.10	.44	.48	.42	.38
13. Att.-European French	.55	.10	.00	.13	.32	.04	.20
14. Motivational Intensity	.26	-.06	.11	.36	.32	.36	.51
15. Desire	.26	.18	.12	.38	.39	.29	.45
16. Orientation Index	.41	-.03	-.04	-.12	-.01	.05	.06
17. Behavioural Intention	.10	-.05	-.12	-.18	-.29	-.48	-.22
18. Opportunity-Use French	-.02	-.11	-.20	-.03	-.24	-.11	-.39
19. No. Years French Study	-.05	.39	.40	.01	.08	-.02	-.03
20. No. Langs. Spoken/Home	-.02	.17	.10	-.22	.01	-.11	.43
21. No. Langs. Speaks	.11	.08	.19	.04	.00	-.13	.34
22. Fre. Teacher-Evaluat'n	.21	.14	.13	.83	.01	-.04	-.04
23. Fre. Teacher-Rapport	.19	.12	.12	.79	-.01	-.01	-.12
24. Fre. Teacher-Comp.	.29	.05	.08	.51	.02	-.02	-.08
25. Fre. Teacher-Inspir'n	.07	.07	.05	.76	.10	-.02	.05
26. Fre. Course-Evaluation	-.01	-.20	.09	.79	.31	.17	.28
27. Fre. Course-Difficulty	.00	-.06	-.21	-.00	.07	-.45	-.14
28. Fre. Course-Utility	-.14	-.18	.15	.59	.49	.13	.04
29. Fre. Course-Interest	-.07	-.18	.09	.78	.22	.00	.36
30. S-R - Writing	.07	.03	.74	.21	.08	.17	.05
31. S-R - Understanding	.05	.05	.81	.09	.07	.11	.22
32. S-R - Reading	-.02	-.07	.78	.18	.07	.09	.05
33. S-R - Speaking	.09	.09	.80	.03	.03	.18	.08
34. CATF - Vocabulary	-.05	.80	-.00	-.01	-.05	.14	.12
35. CATF - Grammar	-.08	.70	.02	.10	-.04	.29	.15
36. CATF - Comp.	-.02	.63	.04	.11	.02	.07	.14
37. Aural Paragraph Comp.	.03	.58	.01	-.11	.04	.05	.01
38. Aural Sent Complet'n	-.16	.61	.13	.05	.15	.26	-.10
39. Grade	.03	.30	.16	.08	.02	.66	.00
40. French Can-Evaluat'n	.68	-.12	.13	.24	.36	-.08	.01
41. Myself - Evaluation	.51	-.07	.20	.35	.01	.09	.17
42. Europe Fre.-Evaluat'n	.69	-.17	.01	.27	.15	.01	.07
43. Eng. Can-Evaluat'n	.50	-.06	.11	.41	.01	-.18	-.13

Table A19 Grade 10 Region M2

	I	II	III	IV	V	VI	VII
1. Spelling Clues	-.01	.30	-.26	-.06	.02	.10	.12
2. Words in Sentences	.03	.50	-.16	.09	.07	.08	.23
3. Paired Associates	.03	.54	-.02	.10	-.20	-.02	.11
4. Need Achievement	.04	.47	.12	.19	.21	.33	-.14
5. Ethnocentrism	-.29	-.52	-.00	.03	.04	.12	-.06
6. French Class Anxiety	-.08	-.31	-.43	-.04	-.09	-.36	-.12
7. French Canadian Atts.	.74	.12	.03	.07	.19	-.10	.16
8. Interest-Foreign Lang.	.75	.36	.26	.14	.02	.08	.09
9. Instrumental	.59	.01	-.18	.19	-.02	.37	.03
10. Integrative	.80	.12	.06	.02	.08	.13	.14
11. Parental Encouragement	.52	-.09	-.06	.14	-.02	.11	.05
12. Att.-Learning French	.74	.13	.30	.35	-.02	.24	.13
13. Att.-European French	.77	.17	.10	-.07	.17	-.04	.18
14. Motivational Intensity	.49	.17	.43	.24	.18	.37	-.01
15. Desire	.74	.13	.41	.28	-.02	.16	.06
16. Orientation Index	.25	-.07	.05	-.15	.07	-.10	.03
17. Behavioural Intention	-.41	.12	-.08	-.25	-.04	-.47	-.23
18. Opportunity-Use French	-.22	-.03	-.40	-.05	.17	-.24	-.16
19. No. Years French Study	.01	.06	.30	-.10	.12	.19	-.02
20. No. Langs. Spoken/Home	-.01	.03	.14	.01	.06	.40	.23
21. No. Langs. Speaks	.15	.06	.13	-.03	.06	.36	.26
22. Fre. Teacher-Evaluat'n	.13	.07	.02	.93	.25	.02	.07
23. Fre. Teacher-Rapport	.21	.06	-.02	.81	.20	-.06	.14
24. Fre. Teacher-Comp.	-.01	.18	.20	.69	.18	-.17	.13
25. Fre. Teacher-Inspir'n	.16	.09	-.04	.73	.08	.26	.23
26. Fre. Course-Evaluation	.55	-.00	.29	.60	.04	.34	-.03
27. Fre. Course-Difficulty	-.28	-.08	-.06	-.07	-.11	-.46	-.28
28. Fre. Course-Utility	.62	.03	.11	.52	-.00	.21	-.08
29. Fre. Course-Interest	.43	-.12	.27	.58	.01	.44	.05
30. S-R - Writing	-.10	.01	.67	.15	.13	.22	.21
31. S-R - Understanding	.18	-.07	.75	.05	.05	-.08	.14
32. S-R - Reading	.04	-.17	.72	.06	.25	.07	.16
33. S-R - Speaking	.19	-.06	.78	.04	-.01	.03	-.00
34. CATF - Vocabulary	.12	.04	.09	.05	.03	.17	.67
35. CATF - Grammar	.07	.36	.14	.12	.21	.16	.59
36. CATF - Comp.	.13	.06	.03	.13	-.06	.09	.66
37. Aural Paragraph Comp.	.20	.22	.22	.13	-.22	.07	.46
38. Aural Sent Complet'n	.11	.38	.40	.06	-.11	.02	.41
39. Grade	.05	.41	.33	.19	-.01	.34	.48
40. French Can-Evaluat'n	.45	-.05	.11	.21	.69	-.11	.13
41. Myself - Evaluation	-.11	.07	.13	.20	.58	.21	-.15
42. Europe Fre.-Evaluat'n	.34	-.03	.18	.14	.79	-.00	-.02
43. Eng. Can-Evaluat'n	.04	-.13	.01	.21	.54	.16	-.15

Table A20 Grade 10 Region M3

	I	II	III	IV	V	VI
1. Spelling Clues	-.11	.51	-.07	-.21	-.01	.01
2. Words in Sentences	.07	.48	-.04	-.01	.07	-.07
3. Paired Associates	.19	.34	-.17	-.26	.10	-.10
4. Need Achievement	.17	-.10	.12	.11	.16	-.14
5. Ethnocentrism	-.07	-.07	-.09	-.18	-.35	.00
6. French Class Anxiety	-.15	-.29	.06	-.34	-.12	.02
7. French Canadian Atts.	.78	.05	.04	-.07	.09	.17
8. Interest-Foreign Lang.	.80	.13	.14	.08	.14	.02
9. Instrumental	.64	.13	-.01	.19	-.32	-.04
10. Integrative	.81	.18	.10	.11	-.02	.04
11. Parental Encouragement	.59	.08	.07	-.03	-.05	.25
12. Att.-Learning French	.83	.12	.21	.14	-.03	-.11
13. Att.-European French	.67	.01	.11	.01	.15	.29
14. Motivational Intensity	.73	.08	.19	.32	.19	-.14
15. Desire	.85	.12	.13	.19	.11	-.07
16. Orientation Index	.23	-.06	.05	.02	.51	.20
17. Behavioural Intention	-.46	-.33	.09	-.24	-.06	.08
18. Opportunity-Use French	-.35	-.02	.05	-.17	-.33	.02
19. No. Years French Study	.09	.08	-.06	-.02	.15	.43
20. No. Langs. Spoken/Home	.37	-.08	.09	.11	-.37	.09
21. No. Langs. Speaks	.46	-.08	.10	.23	-.44	.04
22. Fre. Teacher-Evaluat'n	.20	.07	.90	.08	-.01	.01
23. Fre. Teacher-Rapport	.17	.01	.88	.09	.06	-.01
24. Fre. Teacher-Comp.	.03	.03	.75	.04	.02	.01
25. Fre. Teacher-Inspir'n	.24	.02	.84	.08	-.05	-.07
26. Fre. Course-Evaluation	.67	.01	.55	.17	.08	-.21
27. Fre. Course-Difficulty	-.33	-.26	.09	.05	-.14	.24
28. Fre. Course-Utility	.68	.11	.41	.26	.01	-.07
29. Fre. Course-Interest	.59	-.02	.58	.13	.02	-.24
30. S-R - Writing	.10	.29	.06	.67	.06	-.18
31. S-R - Understanding	.11	.08	.14	.78	.05	.08
32. S-R - Reading	.32	-.01	.07	.75	.06	.06
33. S-R - Speaking	.08	.01	.19	.85	-.03	.11
34. CATF - Vocabulary	.08	.76	.03	.10	.11	-.05
35. CATF - Grammar	.25	.76	.04	.04	-.09	-.12
36. CATF - Comp.	.05	.63	-.10	.12	-.15	.25
37. Aural Paragraph Comp.	.01	.47	.13	.12	.17	.10
38. Aural Sentence Complet'n	-.08	.56	.09	.21	-.21	.16
39. Grade	.27	.67	.09	.29	-.04	-.27
40. Fre. Canadian-Evaluat'n	.47	-.23	.24	-.19	.21	.17
41. Myself - Evaluation	.09	-.16	.20	.23	-.18	.41
42. European Fre.-Evaluat'n	.45	-.25	.42	-.02	.17	.29
43. Eng. Canadian-Evaluat'n	.00	-.08	.39	.09	.01	.22

Table A21 Grade 10 Region M4

	I	II	III	IV	V	VI
1. Spelling Clues	-.10	.26	-.07	.30	-.28	-.03
2. Words in Sentences	.05	.30	.10	.49	-.13	-.07
3. Paired Associates	-.09	.22	.11	.57	.07	.05
4. Need Achievement	.12	-.16	-.12	.40	.28	.17
5. Ethnocentrism	.01	.03	.02	-.48	.02	.05
6. French Class Anxiety	-.13	-.32	.13	-.10	.12	-.26
7. French Canadian Atts.	.69	.13	-.02	.18	.41	-.02
8. Interest-Foreign Lang.	.78	.02	-.07	.26	.14	.15
9. Instrumental	.62	.17	-.07	-.28	.22	.11
10. Integrative	.76	.12	-.08	.07	.27	.15
11. Parental Encouragement	.50	-.04	.06	-.11	.17	.16
12. Att.-Learning French	.86	.13	-.25	-.03	-.02	.17
13. Att.-European French	.55	.00	-.10	.13	.49	.12
14. Motivational Intensity	.75	-.01	-.28	.08	.07	.20
15. Desire	.82	.15	-.25	.03	-.00	.17
16. Orientation Index	.23	-.23	.02	.34	-.04	.00
17. Behavioural Intention	-.59	-.23	.06	-.07	.14	-.06
18. Opportunity-Use French	-.09	-.17	.03	-.07	-.08	-.49
19. No. Years French Study	-.08	.38	.05	-.33	.07	.40
20. No. Langs. Spoken/Home	.13	.01	.08	.03	-.00	.25
21. No. Langs. Speaks	-.01	.03	-.08	.23	-.06	.38
22. Fre. Teacher-Evaluat'n	.16	.02	-.84	.10	.15	.15
23. Fre. Teacher-Rapport	.32	-.04	-.71	.09	.16	.10
24. Fre. Teacher-Comp.	.05	-.01	-.06	.08	.15	.04
25. Fre. Teacher-Inspir'n	.08	-.04	-.70	-.14	.07	-.05
26. Fre. Course-Evaluation	.62	.17	-.65	-.18	.06	.02
27. Fre. Course-Difficulty	-.16	-.50	.05	-.09	.15	-.22
28. Fre. Course-Utility	.71	.16	-.49	-.18	.11	.04
29. Fre. Course-Interest	.54	.05	-.68	-.23	.01	-.02
30. S-R - Writing	.24	.36	-.02	-.11	.02	.64
31. S-R - Understanding	.14	.43	-.06	-.14	-.08	.62
32. S-R - Reading	.19	.26	-.08	-.17	.01	.69
33. S-R - Speaking	.11	.31	-.15	-.08	-.06	.74
34. CATF - Vocabulary	.08	.83	-.09	-.07	-.01	.20
35. CATF - Grammar	.06	.86	.04	.02	-.01	.13
36. CATF - Comp.	.07	.61	-.03	.04	.17	.25
37. Aural Paragraph Comp.	.06	.64	.02	-.14	.16	.15
38. Aural Sent Complet'n	.12	.69	.12	.14	.16	.18
39. Grade	.23	.61	-.01	.29	-.13	.09
40. French Can-Evaluat'n	.46	.11	-.27	.05	.65	-.15
41. Myself - Evaluation	.02	-.01	-.29	.09	.46	.16
42. Europe Fre.-Evaluat'n	.35	.06	-.16	-.01	.72	-.23
43. Eng. Can-Evaluation	.06	.04	-.06	-.16	.46	-.04

Table A22 Grade 10 Region B1

	I	II	III	IV	V	VI	VII
1. Spelling Clues	-.22	.28	-.05	.09	.17	.27	-.42
2. Words in Sentences	.05	.14	-.07	-.07	.03	.50	.00
3. Paired Associates	.02	-.00	-.07	.18	.21	.31	.18
4. Need Achievement	.02	.03	.07	.01	.57	.14	-.07
5. Ethnocentrism	-.42	.02	-.07	-.04	-.23	-.15	.16
6. French Class Anxiety	-.12	-.55	.04	.24	-.30	.06	.01
7. French Canadian Atts.	.43	.17	.41	.28	.02	.28	.27
8. Interest-Foreign Lang.	.36	.18	.48	-.02	.44	.11	.23
9. Instrumental	.12	.09	.63	.02	-.34	.04	.00
10. Integrative	.32	.22	.63	.21	.23	.03	-.05
11. Parental Encouragement	.11	.16	.54	-.03	.17	-.22	.01
12. Att.-Learning French	.57	.21	.55	.00	.28	.07	.25
13. Att.-European French	.13	.32	.35	.31	-.07	.21	.27
14. Motivational Intensity	.56	.23	.39	.09	.18	.06	.17
15. Desire	.52	.12	.52	.01	.26	.09	.42
16. Orientation Index	.30	-.09	-.03	.00	.52	-.05	.09
17. Behavioural Intention	-.48	-.10	-.40	.11	.00	-.16	-.08
18. Opportunity-Use French	.08	-.22	-.21	-.05	-.47	.05	-.28
19. No. Years French Study	-.20	.35	.14	-.07	.05	.09	.46
20. No. Langs. Spoken/Home	.10	.33	.10	.17	.13	-.03	.39
21. No. Langs. Speaks	.13	.34	-.08	-.14	.11	-.12	.36
22. Fre. Teacher-Evaluat'n	.90	.01	-.09	.10	.02	.13	.05
23. Fre. Teacher-Rapport	.85	-.13	-.07	.10	.03	.19	.07
24. Fre. Teacher-Comp.	.78	-.17	.03	.06	-.05	.21	.02
25. Fre. Teacher-Inspir'n	.80	-.04	.17	-.02	.12	-.13	.07
26. Fre. Course-Evaluation	.84	.17	.32	.11	.10	-.18	-.01
27. Fre. Course-Difficulty	-.09	-.44	-.27	.19	-.10	-.38	.07
28. Fre. Course-Utility	.75	.19	.32	.01	-.11	-.12	-.13
29. Fre. Course-Interest	.76	.13	.27	.16	.19	-.36	-.00
30. S-R - Writing	.16	.64	.13	-.11	.02	.11	.12
31. S-R - Understanding	.61	.86	.18	.08	-.02	-.00	.10
32. S-R - Reading	-.17	.72	.13	.12	-.00	-.14	-.18
33. S-R - Speaking	-.03	.83	.14	.14	.03	-.14	-.02
34. CATF - Vocabulary	-.03	.73	.12	-.05	-.02	.39	.14
35. CATF - Grammar	.08	.74	.06	-.03	-.04	.32	.13
36. CATF - Comp.	-.17	.64	.17	.03	-.04	.43	.06
37. Aural Paragraph Comp.	.14	.56	.04	-.09	-.12	.44	.10
38. Aural Sent Complet'n	.10	.68	.02	.04	.07	.28	.30
39. Grade	.27	.38	.23	-.10	.10	.56	-.06
40. French Can-Evaluat'n	.60	.08	.12	.50	-.11	.19	.11
41. Myself - Evaluation	.13	-.07	-.03	.41	.28	-.04	-.27
42. Europe Fre.-Evaluat'n	.13	.04	.10	.69	-.19	-.01	.08
43. Eng. Can-Evaluat'n	.07	-.09	-.03	.67	.18	-.16	-.09

Table A23 Grade 10 Region BC

	I	II	III	IV	V	VI
1. Spelling Clues	-.12	-.07	.57	-.03	-.01	.05
2. Words in Sentences	.05	.08	.65	.03	.01	.12
3. Paired Associates	.16	-.01	.56	.09	.05	-.20
4. Need Achievement	.06	.15	.22	.13	.07	-.01
5. Ethnocentrism	.06	.02	-.17	-.10	-.31	.00
6. French Class Anxiety	-.01	-.39	-.29	-.01	-.02	-.17
7. French Canadian Atts.	.23	.14	.06	.09	.79	.15
8. Interest-Foreign Lang.	.45	.23	.10	.18	.66	-.07
9. Instrumental	.38	.07	.13	-.05	.42	.17
10. Integrative	.41	.15	-.01	.02	.72	.06
11. Parental Encouragement	.15	.22	-.06	.08	.51	-.06
12. Att.-Learning French	.63	.28	.19	.23	.51	-.02
13. Att.-European French	.04	.11	-.00	.22	.62	.19
14. Motivational Intensity	.64	.17	.06	.19	.36	-.05
15. Desire	.63	.31	.06	.16	.52	-.04
16. Orientation Index	.16	.16	-.10	.21	.28	-.22
17. Behavioural Intention	-.53	-.29	-.28	-.11	-.25	.01
18. Opportunity-Use French	-.17	-.41	-.01	.03	-.32	.12
19. No. Years French Study	-.03	.37	.11	.03	.15	.06
20. No. Langs. Spoken/Home	.02	.40	-.34	-.11	.12	.01
21. No. Langs. Speaks	.20	.52	-.10	.03	.06	.02
22. Fre. Teacher-Evaluat'n	.24	.06	.03	.83	.17	.23
23. Fre. Teacher-Rapport	.28	.05	.09	.76	.16	.22
24. Fre. Teacher-Comp.	.05	-.01	.09	.76	.21	.18
25. Fre. Teacher-Inspir'n	.40	.00	.11	.69	.13	.08
26. Fre. Course-Evaluation	.84	.17	.06	.27	.09	.24
27. Fre. Course-Difficulty	-.23	-.40	-.51	-.01	-.02	.01
29. Fre. Course-Utility	.66	.11	.14	.15	.26	.36
29. Fre. Course-Interest	.80	.12	-.07	.30	.06	.17
30. S-R - Writing	.30	.71	.08	-.01	-.03	.06
31. S-R - Understanding	.19	.82	-.00	.03	.03	.04
32. S-R - Reading	.18	.74	-.05	.03	.00	.06
33. S-R - Speaking	.16	.80	.00	.02	.06	-.04
34. CATF - Vocabulary	.04	.61	.41	-.04	.08	-.04
35. CATF - Grammar	.14	.65	.49	.05	.16	.00
36. CATF - Comp.	-.06	.46	.33	.00	.18	-.07
37. Aural Paragraph Comp.	-.00	.59	.03	.09	.29	-.02
38. Aural Sentence Complet'n	-.01	.67	.17	.11	.25	.01
39. Grade	.34	.41	.66	.09	.13	-.01
40. Fre. Canadian-Evaluat'n	.19	.10	.01	.24	.48	.57
41. Myself - Evaluation	.06	-.04	.04	.21	.03	.46
42. European Fre.-Evaluat'n	-.14	.13	-.02	.26	.39	.56
43. Eng. Canadian-Evaluat'n	-.10	-.03	-.03	.07	-.06	.56



Table A24 Grade 10 Region B3

	I	II	III	IV	V	VI	VII
1. Spelling Clues	-.07	-.08	-.02	-.03	-.34	.11	.36
2. Words in Sentences	-.18	.24	.02	.01	.07	-.24	.66
3. Paired Associates	.14	.25	-.30	-.01	-.21	-.26	.26
4. Need Achievement	.11	-.04	-.08	.27	-.17	-.16	.36
5. Ethnocentrism	-.13	-.19	-.09	-.08	.01	-.09	-.62
6. French Class Anxiety	-.11	-.09	.08	.03	-.02	-.71	.07
7. French Canadian Atts.	.09	-.23	-.01	.85	-.11	-.06	.08
8. Interest-Foreign Lang.	.39	.28	.10	.52	.03	.15	-.12
9. Instrumental	.27	.05	.21	.49	-.30	-.23	-.16
10. Integrative	.34	.02	-.05	.76	-.09	-.12	.01
11. Parental Encouragement	.28	.03	.22	.16	-.07	-.45	.04
12. Att.-Learning French	.54	.07	-.16	.70	.08	.18	.01
13. Att.-European French	.11	.05	.11	.82	.07	.05	.12
14. Motivational Intensity	.52	.33	-.12	.53	.12	.11	-.23
15. Desire	.57	.25	-.08	.61	.05	.07	-.11
16. Orientation Index	-.08	-.07	-.34	.09	.27	.24	.26
17. Behavioural Intention	-.39	-.23	.17	-.08	-.26	.34	.06
18. Opportunity-Use French	-.19	-.23	-.19	-.16	-.18	-.16	-.05
19. No. Years French Study	-.02	-.22	.20	-.35	-.19	.18	-.21
20. No. Langs. Spoken/Home	.17	.35	-.01	.29	-.31	.28	-.10
21. No. Langs. Speaks	.20	.45	-.01	.22	-.09	.37	-.33
22. Fre. Teacher-Evaluat'n	.58	.18	.41	.37	.26	-.03	.32
23. Fre. Teacher-Rapport	.51	.18	.48	.35	.18	-.16	.21
24. Fre. Teacher-Comp.	.63	.12	.49	.27	.18	-.05	.27
25. Fre. Teacher-Inspir'n	.82	.02	.16	.20	.05	-.00	-.11
26. Fre. Course-Evaluation	.83	.19	.17	.29	.06	.00	.09
27. Fre. Course-Difficulty	-.17	-.64	.06	-.05	.03	-.39	-.21
28. Fre. Course-Utility	.71	.19	.33	.24	.09	-.11	.14
29. Fre. Course-Interest	.83	.08	-.12	.10	.01	.08	-.08
30. S-R - Writing	-.06	.22	-.24	-.03	.70	-.08	-.05
31. S-R - Understanding	.14	.40	-.07	.10	.73	.15	.04
32. S-R - Reading	.32	.10	.07	.02	.71	-.12	-.06
33. S-R - Speaking	.10	.33	-.15	-.03	.73	.31	-.04
34. CATF - Vocabulary	.04	.74	.15	.11	.29	.07	.11
35. CATF - Grammar	.21	.73	.32	-.00	.30	-.15	.15
36. CATF - Comp.	.08	.62	.05	-.20	.21	.00	.02
37. Aural Paragraph Comp.	.03	.73	.05	.04	.02	-.21	.09
38. Aural Sent Complet'n	.15	.63	-.09	.21	.31	-.31	-.01
39. Grade	.21	.68	.06	.13	.17	.29	.07
40. French Can-Evaluat'n	.16	.09	.26	.58	.12	-.13	.23
41. Myself - Evaluation	.04	.18	.56	.08	-.26	-.04	-.05
42. Europe Fre.-Evaluat'n	.06	.17	.48	.55	.34	-.01	.16
43. Eng. Can-Evaluat'n	.15	.01	.71	-.04	-.14	-.09	.03

Table A25 Grade 11 Region M1

	I	II	III	IV	V	VI	VII
1. Spelling Clues	-.11	.21	-.24	.14	.03	.06	-.13
2. Words in Sentences	.01	.55	-.14	-.03	.15	-.13	-.09
3. Paired Associates	.12	.37	-.07	.13	.05	-.09	-.24
4. Need Achievement	.31	-.11	.16	.09	.34	-.04	.29
5. Ethnocentrism	-.30	-.41	-.03	.07	-.07	-.25	.12
6. French Class Anxiety	-.05	-.22	.09	-.44	-.07	.06	-.22
7. French Canadian Atts.	.59	.29	.03	-.15	.11	.51	.05
8. Interest-Foreign Lang.	.63	.28	.02	.02	.43	.15	.18
9. Instrumental	.50	-.17	.07	.24	-.00	.06	-.18
10. Integrative	.76	.29	.08	.04	.19	.30	.11
11. Parental Encouragement	.51	-.11	.06	.04	.03	.00	.09
12. Att.-Learning French	.40	.26	.18	.25	.68	.14	.08
13. Att.-European French	.21	.02	-.12	-.03	.42	.48	-.12
14. Motivational Intensity	.38	.09	.17	.26	.62	.14	.19
15. Desire	.47	.32	.14	.11	.62	.07	.14
16. Orientation Index	.20	.35	.17	.02	.15	.10	.32
17. Behavioural Intention	-.36	-.20	-.14	-.20	-.16	.05	.12
18. Opportunity-Use French	.08	-.25	-.12	-.01	-.24	.06	-.13
19. No. Years French Study	.19	.47	.15	-.01	-.22	-.02	.04
20. No. Langs. Spoken/Home	-.01	.09	.01	.11	-.06	-.03	.55
21. No. Langs. Speaks	-.00	.01	.01	.22	.15	.05	.45
22. Fre. Teacher-Evaluat'n	.14	.10	.87	.06	.25	-.04	.01
23. Fre. Teacher-Rapport	.14	.12	.81	-.01	.21	-.01	.19
24. Fre. Teacher-Comp.	.09	.18	.74	.06	.22	.09	-.17
25. Fre. Teacher-Inspir'n	.04	.21	.58	-.04	.56	-.07	.02
26. Fre. Course-Evaluation	.14	.22	.26	.19	.72	.24	-.02
27. Fre. Course-Difficulty	.07	-.20	.15	-.49	-.10	-.08	-.13
28. Fre. Course-Utility	.46	.20	.15	.18	.42	.31	-.13
29. Fre. Course-Interest	.03	.19	.24	.04	.77	.18	-.02
30. S-R - Writing	.13	.12	.13	.69	.11	.15	-.03
31. S-R - Understanding	.15	.17	.21	.66	.03	-.03	.21
32. S-R - Reading	.01	.02	-.01	.71	.10	-.14	.14
33. S-R - Speaking	.22	.16	.04	.71	.02	.20	-.06
34. CATF - Vocabulary	-.08	.68	.03	.23	.26	.15	.06
35. CATF - Grammar	-.08	.72	.05	.36	.28	.11	-.02
36. CATF - Comp.	-.01	.50	.07	.31	.21	.16	.16
37. Aural Paragraph Comp.	.14	.69	.15	.07	.05	.11	.15
38. Aural Sent Complet'n	.11	.62	.16	.25	.06	-.07	.07
39. Grade	-.09	.60	.06	.30	.36	-.01	.02
40. French Can-Evaluat'n	.20	.07	.06	.05	.02	.72	.11
41. Myself - Evaluation	.25	-.19	.28	.15	.08	.16	.37
42. Europe Fre.-Evaluat'n	.03	-.08	.01	.11	.22	.77	.01
43. Eng. Can-Evaluat'n	-.02	-.04	.41	.15	-.00	.30	.25

Table A26 Grade 11 Region M2

	I	II	III	IV	V	VI	VII
1. Spelling Clues	.06	.12	-.17	.10	.59	.28	-.10
2. Words in Sentences	.05	.23	-.04	.12	.66	-.08	.01
3. Paired Associates	-.01	.02	-.06	.15	.57	.02	.03
4. Need Achievement	.25	.05	.01	.01	.09	.24	.53
5. Ethnocentrism	-.17	-.02	-.04	-.00	-.27	.39	-.48
6. French Class Anxiety	-.17	-.52	-.08	-.14	-.09	-.12	-.10
7. French Canadian Atts.	.70	-.12	.09	-.16	.33	-.14	.12
8. Interest-Foreign Lang.	.79	.15	.15	.14	.13	.07	.25
9. Instrumental	.64	-.10	.14	.08	-.17	.31	-.03
10. Integrative	.81	.06	.12	.01	.09	-.01	.17
11. Parental Encouragement	.60	-.05	-.02	.01	-.27	.02	-.13
12. Att.-Learning French	.79	.19	.37	.20	.02	.01	.06
13. Att.-European French	.59	-.18	.33	-.08	.23	.03	.14
14. Motivational Intensity	.68	.17	.31	.26	.05	.06	.22
15. Desire	.80	.21	.27	.17	.07	-.03	.18
16. Orientation Index	.35	.05	.01	.22	.00	-.28	.06
17. Behavioural Intention	-.54	-.28	-.08	-.13	-.07	-.10	.00
18. Opportunity-Use French	-.23	-.07	.05	-.17	-.03	-.14	.04
19. No. Years French Study	.02	.21	-.06	.04	.07	.15	-.04
20. No. Langs. Spoken/Home	.12	.05	.07	.07	.00	.76	.13
21. No. Langs. Speaks	.24	-.02	.15	.17	-.01	.63	.28
22. Fre. Teacher-Evaluat'n	.13	-.09	.87	-.04	-.07	-.07	.14
23. Fre. Teacher-Rapport	.05	-.17	.85	-.08	.03	-.10	.10
24. Fre. Teacher-Comp.	.11	-.01	.83	-.03	-.01	.01	.12
25. Fre. Teacher-Inspir'n	.13	-.03	.81	.05	-.02	.05	-.01
26. Fre. Course-Evaluation	.28	.12	.79	.25	-.09	.11	.15
27. Fre. Course-Difficulty	-.12	-.24	-.14	-.25	-.40	.08	.20
28. Fre. Course-Utility	.42	.09	.59	.20	-.13	.08	.12
29. Fre. Course-Interest	.24	.11	.77	.20	-.07	.18	.12
30. S-R - Writing	.12	.16	.05	.70	.24	.01	.09
31. S-R - Understanding	.12	.15	.03	.76	.10	.06	.02
32. S-R - Reading	.07	-.10	.06	.73	.26	.17	-.08
33. S-R - Speaking	.14	.19	.14	.76	.03	-.03	.03
34. CATF - Vocabulary	.09	.59	-.11	.18	.56	-.06	-.06
35. CATF - Grammar	.16	.58	-.17	.13	.54	-.20	-.12
36. CATF - Comp.	-.07	.51	.07	.12	.48	-.12	-.12
37. Aural Paragraph Comp.	-.05	.70	-.01	.20	.14	-.03	-.14
38. Aural Sent Complet'n	.13	.75	-.06	-.06	.06	.03	-.06
39. Grade	.03	.47	.06	.01	.52	-.17	-.03
40. French Can-Evaluat'n	.36	-.22	.29	-.27	.20	-.18	.44
41. Myself - Evaluation	.24	-.05	.17	.11	-.25	.02	.59
42. Europe Fre.-Evaluat'n	.32	-.22	.42	-.05	.07	-.13	.55
43. Eng. Can-Evaluat'n	-.10	-.14	.25	.01	-.13	.04	.66

Table A27 Grade 11 Region M2

	I	II	III	IV	V	VI	VII
1. Spelling Clues	.08	.39	.11	.05	-.30	.16	-.16
2. Words in Sentences	.15	.57	.02	.06	-.08	-.02	-.14
3. Paired Associates	-.05	.52	.12	-.08	.00	.05	.22
4. Need Achievement	.38	.13	.19	-.02	.02	.11	.21
5. Ethnocentrism	-.20	-.27	.13	.11	.27	-.20	.12
6. French Class Anxie	.00	-.21	-.07	-.37	-.17	-.13	.19
7. French Canadian Atts.	.59	.21	.11	-.01	.25	.41	-.12
8. Interest-Foreign Lang.	.79	.14	.09	-.10	.16	.15	.13
9. Instrumental	.58	.08	-.03	-.06	.20	-.17	.25
10. Integrative	.75	.22	.11	.01	.00	.24	.05
11. Parental Encouragement	.46	-.09	.05	.09	.03	.31	.07
12. Att.-Learning French	.77	.16	.24	.29	.14	.06	.07
13. Att.-European French	.39	.01	.10	-.05	.40	.42	.07
14. Motivational Intensity	.67	.05	.36	.12	.24	.00	.08
15. Desire	.83	.19	.21	.15	.11	.11	-.07
16. Orientation Index	.16	.03	.10	.06	-.01	.44	-.13
17. Behavioural Intention	-.51	-.27	-.09	-.20	-.06	-.03	.15
18. Opportunity-Use French	-.17	.08	-.15	-.26	-.05	-.21	.05
19. No. Years French Study	.07	.03	-.15	.18	.02	.42	.08
20. No. Langs. Spoken/Home	.12	.01	.03	-.04	.54	-.10	.05
21. No. Langs. Speaks	.17	.03	.07	.11	.48	.04	.00
22. Fre. Teacher-Evaluat'n	.14	.09	.86	.01	.01	.14	.20
23. Fre. Teacher-Rapport	.15	.06	.82	.03	.04	.17	.00
24. Fre. Teacher-Comp.	.00	.10	.72	.01	-.03	.23	.23
25. Fre. Teacher-Inspir'n	.17	-.02	.78	.08	.11	-.13	.14
26. Fre. Course-Evaluation	.38	.10	.70	.23	.35	-.25	-.13
27. Fre. Course-Difficulty	-.20	-.29	.09	-.31	-.28	.03	.14
28. Fre. Course-Utility	.43	.08	.48	.18	.27	-.05	-.04
29. Fre. Course-Interest	.29	.04	.78	.19	.27	-.24	-.19
30. S-R - Writing	.05	.37	.08	.69	.05	-.13	.06
31. S-R - Understanding	.08	.03	.08	.82	.02	.03	.03
32. S-R - Reading	.07	.19	.03	.78	.02	.13	.15
33. S-R - Speaking	.00	.15	.12	.74	-.12	.19	.15
34. CATF - Vocabulary	.09	.84	.03	.09	.10	.01	.00
35. CATF - Grammar	.07	.81	-.03	.26	.14	-.11	.05
36. CATF - Comp.	.20	.64	.03	.16	.03	.05	.11
37. Aural Paragraph Comp.	.10	.35	.18	.19	.03	.32	-.04
38. Aural Sent Complet'n	.13	.56	-.15	.28	-.14	.26	.14
39. Grade	.26	.73	.24	.14	.02	-.12	-.20
40. French Can-Evaluat'n	.24	.04	.29	.02	.51	.23	.29
41. Myself - Evaluation	.29	.03	.10	.11	.12	-.05	.53
42. Europe Fre.-Evaluat'n	.20	.03	.27	-.05	.59	.31	.08
43. Eng. Can-Evaluat'n	.08	-.03	.29	.20	.17	-.05	.50

Table A28 Grade 11 Region M4

	I	II	III	IV	V	VI
1. Spelling Clues	-.02	.12	.61	.08	-.02	-.07
2. Words in Sentences	-.07	-.03	.56	.03	.14	-.07
3. Paired Associates	-.09	-.03	.53	.10	.01	.07
4. Need Achievement	.00	-.02	.39	.13	.18	.22
5. Ethnocentrism	-.11	-.01	-.56	-.25	-.05	-.11
6. French Class Anxiety	.06	+.48	-.22	-.04	-.26	-.21
7. French Canadian Atts.	.62	.01	.15	.22	.36	.25
8. Interest-Foreign Lang.	.49	.10	.26	.17	.49	.11
9. Instrumental	.66	.11	-.11	-.15	.14	.07
10. Integrative	.67	.11	.12	.04	.37	.21
11. Parental Encouragement	.60	.05	-.15	-.03	.04	-.02
12. Att.-Learning French	.34	.18	.22	.20	.74	.21
13. Att.-European French	.47	.05	.15	.25	.17	.32
14. Motivational Intensity	.37	.06	.26	.20	.60	.15
15. Desire	.45	.14	.26	.14	.67	.08
16. Orientation Index	.03	-.14	.18	.12	.20	.12
17. Behavioural Intention	-.21	-.15	-.12	-.01	-.55	.05
18. Opportunity-Use French	-.07	-.29	.01	-.03	-.38	.07
19. No. Years French Study	.04	.59	-.12	-.01	.07	-.14
20. No. Langs. Spoken/Home	-.12	.31	-.15	.01	.00	.07
21. No. Langs. Speaks	-.04	.25	-.03	.05	.09	.02
22. Fre. Teacher-Evaluat'n	.05	-.04	.10	.91	.16	.15
23. Fre. Teacher-Rapport	-.01	-.06	.06	.84	.23	.20
24. Fre. Teacher-Comp.	.07	-.04	.27	.78	.03	.17
25. Fre. Teacher-Inspir'n	.02	.04	-.07	.74	.31	.23
26. Fre. Course-Evaluation	.14	.19	.12	.53	.72	.37
27. Fre. Course-Difficulty	.04	-.38	-.16	.10	-.35	-.07
28. Fre. Course-Utility	.38	.15	.08	.25	.50	.39
29. Fre. Course-Interest	.00	.14	.02	.35	.74	.27
30. S-R - Writing	.06	.67	.25	.02	.09	.19
31. S-R - Understanding	.11	.78	.13	-.10	.10	.19
32. S-R - Reading	.13	.74	.17	-.08	.01	.11
33. S-R - Speaking	.09	.78	.09	.02	.16	.17
34. CATF - Vocabulary	.21	.35	.57	-.20	.16	-.21
35. CATF - Grammar	.13	.50	.65	-.07	.19	-.23
36. CATF - Comp.	.02	.34	.49	-.05	.16	-.00
37. Aural Paragraph Comp.	.09	.47	.38	-.11	-.04	-.18
38. Aural Sent Complet'n	.04	.57	.38	.16	-.01	-.30
39. Grade	.13	.12	.64	-.10	.41	.04
40. French Can-Evaluat'n	.25	.07	-.06	.26	.31	.61
41. Myself - Evaluation	.07	.16	.07	.13	.05	.54
42. Europe Fre.-Evaluat'n	.09	.07	.04	.19	.21	.68
43. Eng. Can-Evaluat'n	.10	.02	-.16	.11	.01	.51

Table A29 Grade 11 Region B1

	I	II	III	IV	V	VI	VII	VIII
1. Spelling Clues	-.10	-.10	-.06	.48	-.16	-.02	.20	-.04
2. Words in Sentences	.08	.09	-.10	.45	-.08	-.24	.13	-.05
3. Paired Associates	.15	.10	.01	.41	.36	-.18	-.08	-.28
4. Need Achievement	.25	-.05	.06	.18	.28	-.52	-.03	.10
5. Ethnocentrism	.05	-.06	.09	-.23	.08	.55	-.07	-.04
6. Fre Class Anxiety	-.26	-.26	-.25	-.03	.19	.33	-.33	.19
7. Fre Canadian Atts.	.46	.16	-.08	-.01	.21	.07	-.07	.57
8. Int-Foreign Lang.	.81	.17	-.10	-.09	.23	-.05	-.07	.09
9. Instrumental	.40	.05	-.04	.11	.06	.50	-.07	.33
10. Integrative	.54	.23	.06	-.22	.13	.30	.07	.35
11. Parental Encourage	-.06	-.04	.03	-.07	-.14	-.02	-.01	.59
12. Att.-Learning Fre.	.87	.14	.18	-.09	.12	-.06	.12	.05
13. Att.-European Fre.	.32	-.24	.15	.05	.42	.13	.04	-.11
14. Motiv. Intensity	.75	-.02	.16	-.08	.21	-.04	-.01	-.07
15. Desire	.77	.15	.09	-.23	.09	.03	.11	-.08
16. Orientation Index	.11	.21	-.06	.31	.30	-.07	-.41	-.04
17. Behav. Intention	-.47	.05	.08	-.25	.20	.14	-.15	-.20
18. Opport.-Use French	-.37	-.16	-.08	.48	-.05	.46	-.02	.02
19. # Years Fre Study	-.11	.29	.07	.00	.04	-.19	.05	-.19
20. # Langs Spoken/Home	.27	-.04	-.04	-.64	-.01	-.01	.06	.07
21. # Langs Speaks	.34	.08	-.02	-.45	.08	.17	.16	-.23
22. Fre. Teacher-Eval	.13	-.02	.78	-.05	.22	.02	.01	-.05
23. Fre. Teacher-Rapp.	.14	.01	.79	-.02	.28	.09	-.11	.12
24. Fre. Teacher-Comp.	.11	.04	.58	.02	.22	.09	.20	-.16
25. Fre. Teacher-Inspir	.28	.01	.74	-.06	.09	-.18	-.10	.13
26. Fre. Course-Eval.	.82	.08	.39	-.11	-.06	-.04	.03	-.02
27. Fre. Course-Diff.	-.41	-.35	-.37	.08	-.01	-.03	-.26	.09
28. Fre. Course-Utility	.56	.10	.28	.06	.15	.02	.29	.06
29. Fre. Course-Int.	.75	.12	.45	-.02	-.18	-.04	-.10	.07
30. S-R - Writing	.21	.70	.06	.17	-.00	.19	.17	-.17
31. S-R - Understanding	.19	.80	.05	-.14	.05	.09	.28	.22
32. S-R - Reading	.13	.82	.01	.05	.05	-.10	.15	.08
33. S-R - Speaking	.11	.79	-.13	-.10	.00	-.10	.29	.05
34. CATF - Vocabulary	.16	.25	-.05	-.09	-.01	-.07	.73	-.01
35. CATF - Grammar	.16	.32	.18	.23	-.03	.08	.73	-.16
36. CATF - Comp.	.02	.16	-.11	.17	.14	.07	.75	.09
37. Aural Para. Comp.	.09	.40	.26	.03	.01	-.10	.59	.15
38. Aural Sent Complet.	-.15	.11	-.08	-.10	.21	-.17	.63	-.14
39. Grade	.29	.40	.08	.36	.02	-.11	.58	-.10
40. French Can-Eval.	.26	.31	.24	-.09	.50	-.15	.14	.45
41. Myself - Eval.	.17	-.03	.40	-.04	.57	-.21	.28	.02
42. Europe Fre.-Eval.	.08	.10	.34	-.08	.70	.11	.13	-.02
43. Eng. Can-Evaluat'n	.01	.02	.25	-.22	.71	.00	-.03	-.04

Table A30 Grade 11 Region B3

	I	II	III	IV	V	VI	VII
1. Spelling Clues	-.11	.12	.09	.41	-.19	.03	-.04
2. Words in Sentences	.01	-.05	.04	.51	-.08	.12	-.09
3. Paired Associates	.02	.00	.05	.41	-.03	.01	.07
4. Need Achievement	-.07	.11	.12	.27	.16	-.25	.15
5. Ethnocentrism	-.04	.04	.01	-.37	.00	.19	-.08
6. French Class Anxiety	-.51	-.04	.09	-.14	.18	.30	-.17
7. French Canadian Atts.	.19	.01	.79	-.01	.14	-.09	.04
8. Interest-Foreign Lang.	.15	.15	.69	.15	.07	-.12	.41
9. Instrumental	.06	.05	.50	.15	-.00	.20	-.01
10. Integrative	.15	.09	.74	.02	.07	-.01	.17
11. Parental Encouragement	.13	.09	.53	.16	.11	-.27	.19
12. Att.-Learning French	.20	.32	.57	.12	.07	.01	.58
13. Att.-European French	.20	.16	.57	-.07	.28	.08	.01
14. Motivational Intensity	.14	.27	.43	.04	.22	.00	.58
15. Desire	.25	.23	.58	.08	.10	-.11	.55
16. Orientation Index	-.07	-.06	.09	-.05	.18	-.18	.40
17. Behavioural Intention	-.20	-.14	-.15	.20	-.08	-.04	-.54
18. Opportunity-Use French	-.35	.00	-.16	.13	.12	.34	-.28
19. No. Years French Study	.54	.02	.00	-.12	.02	-.32	-.01
20. No. Langs. Spoken/Home	.45	-.12	-.03	-.02	.10	-.22	.02
21. No. Langs. Speaks	.52	-.03	.02	-.07	.08	-.04	.27
22. Fre. Teacher-Evaluat'n	-.02	.82	.10	.00	.31	-.09	-.06
23. Fre. Teacher-Rapport	.03	.79	.09	.10	.19	-.15	-.03
24. Fre. Teacher-Comp.	-.09	.78	.13	.09	.22	-.13	-.10
25. Fre. Teacher-Inspir'n	-.14	.74	.05	.12	.17	-.04	.11
26. Fre. Course-Evaluation	.13	.75	.12	-.19	.00	.27	.42
27. Fre. Course-Difficulty	-.52	-.12	.01	-.18	-.06	-.04	-.24
28. Fre. Course-Utility	.15	.65	.29	-.17	-.07	.26	.31
29. Fre. Course-Interest	-.01	.69	.12	-.14	.01	.31	.42
30. S-R - Writing	.77	.08	.26	-.09	-.14	-.06	.04
31. S-R - Understanding	.78	.06	.26	-.09	-.08	-.12	.13
32. S-R - Reading	.69	.11	.22	-.13	-.10	-.14	.10
33. S-R - Speaking	.77	.01	.19	-.23	-.03	-.15	.19
34. CATF - Vocabulary	.80	-.01	.13	.12	-.02	.12	-.09
35. CATF - Grammar	.83	-.04	.04	.18	.08	.21	-.00
36. CATF - Comp.	.54	-.01	.26	-.13	.01	.10	-.17
37. Aural Paragraph Comp.	.69	-.07	.13	.04	.06	.16	-.04
38. Aural Sent Complet'n	.77	-.11	.13	.08	.07	.06	-.01
39. Grade	.65	.00	-.03	.45	.09	.38	.14
40. French Can-Evaluat'n	.14	.17	.47	-.14	.53	-.00	.05
41. Myself - Evaluation	.00	.24	.05	-.06	.63	.03	.14
42. Europe Fre.-Evaluat'n	-.01	.28	.37	-.15	.64	.03	.08
43. Eng. Can-Evaluat'n	.04	.24	.16	-.08	.57	.02	.14

Table A31 Grade 11 Region B3

	I	II	III	IV	V	VI	VII	VIII
1. Spelling Clues	.18	-.17	.32	.18	.07	.23	.00	-.02
2. Words in Sentences	.00	-.18	.46	.13	-.13	.02	-.07	.06
3. Paired Associates	.09	-.16	.19	.02	-.23	.02	.22	.13
4. Need Achievement	.20	-.01	.37	.14	.15	.02	.13	-.16
5. Ethnocentrism	.09	.03	-.62	.12	-.12	.14	-.02	-.07
6. Fre Class Anxiety	-.04	-.63	-.31	.28	-.18	.04	-.12	-.17
7. Fre Canadian Atts.	.37	.02	.22	.15	.28	-.55	.09	.02
8. Int-Foreign Lang.	.75	-.01	.11	.04	.05	.23	.13	.05
9. Instrumental	.42	-.44	-.25	.15	-.01	.08	.09	.17
10. Integrative	.68	-.03	-.01	.27	.06	-.10	.04	.08
11. Parental Encourage	.39	-.20	.03	.35	-.20	-.05	.05	-.14
12. Att.-Learning Fre.	.71	.23	.10	-.01	-.02	-.14	.37	.17
13. Att.-European Fre.	.51	.19	-.11	-.01	.29	-.05	-.10	.09
14. Motiv. Intensity	.54	.22	.17	-.01	.10	.26	.43	.12
15. Desire	.61	.35	.03	-.11	-.07	-.18	.40	.11
16. Orientation Index	.00	-.05	-.09	-.05	-.07	-.41	-.01	-.11
17. Behav. Intention	-.35	.05	-.03	.14	-.25	.11	-.11	.30
18. Opport.-Use French	-.05	-.48	.03	.07	.17	.11	.04	.25
19. # Years Fre Study	-.03	.23	-.02	-.11	.23	.01	-.13	.14
20. # Langs Spoken/Home	.32	-.06	-.29	.43	.04	.14	-.02	-.15
21. # Langs Speaks	.39	.29	.02	.36	.19	.31	.02	-.08
22. Fre. Teacher-Eval	.13	.05	.01	.70	.24	.16	.39	.04
23. Fre. Teacher-Rapp.	.14	-.09	.21	.70	.24	.21	.18	-.02
24. Fre. Teacher-Comp.	.06	.15	-.05	.67	.12	-.05	.12	.06
25. Fre. Teacher-Inspir	.13	.10	-.10	.41	.09	.09	.73	-.08
26. Fre. Course-Eval.	.36	-.07	-.07	.41	.20	-.12	.62	.27
27. Fre. Course-Diff.	-.19	-.24	.01	-.03	-.21	-.02	-.07	-.59
28. Fre. Course-Utility	.48	-.12	.14	.30	.17	.15	.43	.33
29. Fre. Course-Int.	.35	.05	-.08	.28	.08	-.16	.72	.04
30. S-R - Writing	.12	.61	-.05	.18	.10	.31	.21	.29
31. S-R - Understanding	-.06	.72	-.14	.10	.18	-.01	.01	.17
32. S-R - Reading	.13	.73	-.20	.02	.03	.14	.21	.06
33. S-R - Speaking	.08	.89	-.06	.01	.04	.02	.08	-.06
34. CATF - Vocabulary	.12	.47	.43	.09	-.22	.32	-.14	.35
35. CATF - Grammar	-.01	.55	.31	.16	-.01	.23	-.25	.54
36. CATF - Comp.	.05	.34	.63	-.08	.07	.30	-.23	.21
37. Aural Para. Comp.	-.03	.47	.12	.05	.13	-.10	-.43	.28
38. Aural Sent Complet.	.13	.56	-.05	.10	-.22	-.07	-.23	.12
39. Grade	.33	.07	.31	.01	.03	.19	.25	.57
40. French Can-Eval.	-.01	.08	.21	.14	.65	-.35	.23	-.01
41. Myself - Eval.	.23	-.04	-.06	.18	.42	.31	.13	.01
42. Europe Fre.-Eval.	.08	.07	.04	.15	.73	.03	-.03	.04
43. Eng. Can-Evaluat'n	.19	-.14	.04	.15	.54	.17	.10	.18



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