A STUDY OF THE VALIDITY
OF THE PIMSLEUR LANGUAGE APTITUDE
BATTERY WITH BEGINNING FRENCH STUDENTS

A THESIS
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for the Degree Master of Arts

by
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CHAPTER I

INTRODUCTION

After Russia orbited its Sputnik satellite in 1957, a great emphasis was placed on science, mathematics, and foreign languages in the American public schools. Foreign languages had never before received so much attention or appeared so important to students, parents, and educators. However, our school systems were not ready for this increased emphasis, and foreign languages continued to be taught as they had been for generations. The primary goals were reading and writing the language—and therefore translation and the learning of grammar rules and vocabulary lists were predominant activities in the classes. Little was done in most classrooms to help students speak and understand the language. Young teachers were teaching with the same grammar-translation methods by which they themselves had been taught; few teachers could communicate fluently in the foreign language.

But the need was felt all over the country to teach our students to speak foreign languages. Materials had to be developed, and teachers had to be trained and retrained to teach languages audio-lingually. Audio-lingual describes
the new goals being stressed in foreign language learning, first understanding and speaking and later reading and writing that which already can be comprehended and spoken (Brooks, 1960).

Foreign language aptitude testing in the past was based on predicting achievement in the goals stressed at that time—namely, reading and writing the language. But in light of the new emphasis on the audio-lingual approach, the talents or abilities necessary to succeed in today’s foreign language classroom should be identified and an aptitude test developed for measuring them.

**Statement of Purpose**

With the prevalent awareness of the value of foreign language study, a way was needed to predict which individuals would succeed better than others in learning a foreign language and perhaps even to diagnose the problems of those who had low aptitude. An aptitude test should serve these two functions—prediction and diagnosis. This entire study is concerned with prediction of achievement in French, by which is meant being able to tell before the learner has had any experience with the language how successful he is likely to be at learning it. Moreover, if an aptitude battery can effectively predict achievement in a foreign language by measuring several somewhat independent abilities involved in language learning, then it follows that the subtest scores
ought to contain information useful for the diagnosis of specific learning difficulties. It should help identify the kinds of abilities it takes to learn a foreign language and show in which ones a student is strong or weak.

One such device was developed by Dr. Paul Pimsleur of The Ohio State University; the test is called the Pimsleur Language Aptitude Battery (henceforth occasionally referred to as the LAB). It is the purpose of this study to test the validity of the Pimsleur Language Aptitude Battery for predicting the achievement of students in beginning French classes. The criterion used to measure this achievement is the Modern Language Association Cooperative French Test, a new test developed to meet the need for standardized achievement testing in an audio-lingually oriented foreign language program.

**Statement of the Problem**

Is there a high enough degree of correlation between scores on the Pimsleur Language Aptitude Battery and scores on the MLA-Cooperative French Test to validate the former as a prognostic test for beginning French students? Separate evaluations of the LAB will be made for predicting the four language skills. The experimental questions to be answered are therefore:

1. To what degree does the Language Aptitude Battery predict achievement in the reading of French?
2. To what degree does the Language Aptitude Battery predict achievement in the **writing** of French?

3. To what degree does the Language Aptitude Battery predict achievement in **understanding** spoken French?

4. To what degree does the Language Aptitude Battery predict achievement in **speaking** French?

**Significance of the Study**

Most schools have some selection procedures to determine who may take a foreign language and at what grade level, who will be placed in an accelerated class and who in a slower class. It is important that this procedure be as accurate as possible because the more valid the means of predicting achievement and diagnosing potential problem areas, the fewer students will be misplaced or passed over.

It has been shown (Morrison, 1962) that perhaps as many as 20% of high school foreign language students are "under-achievers," that is, they do significantly less well in foreign languages than in their other subjects. Even worse, of all those who begin a modern foreign language, only 50% continue past the first year. And only about 39% of these go into the third year (MLA Report, 1965, p. 6)!

A study by Pimsleur et al (1963) showed that one of the major causes of foreign language under-achievement is the schools' failure to provide a coordinated language program. However, weaknesses in a foreign language program may contribute to
under-achievement, but they cannot make a student under-achieve. The fact that most students do achieve at their normal levels points to the individual student and his ability or talent for foreign language learning as the source of much of the problem.

Two predictors that schools commonly use to place foreign language students are IQ and English grades. However, studies have shown that grade-point average is an even better predictor (Morrison, 1962; vonWittich, 1962).

**TABLE 1**

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Correlation with language grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>IQ</td>
<td>r = .46</td>
</tr>
<tr>
<td>English grades</td>
<td>r = .57</td>
</tr>
<tr>
<td>Grade-point average</td>
<td>r = .62</td>
</tr>
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</table>

from Pimsleur et al, 1963, p. 35.

But grade-point average measures general academic achievement, and it can predict foreign language achievement only insofar as foreign language study resembles other academic subjects.

The more foreign language courses move in the direction of emphasizing audio-lingual accomplishment, the more they will call upon specialized language aptitudes, such as mimicry and auditory discrimination. It follows then that the more audio-lingual the course, the less appropriate it will be to use a general academic predictor to select students for it. Such a predictor will fail to detect students who have more talent for foreign languages than for other school subjects. The conclusion is clear: there is need for schools to
use specialized techniques in selecting students for foreign language study, rather than relying on past records alone. Moreover, the more audio-lingual the foreign language course, the more imperative is this need (Pimsleur, 1952, p. 136).

Nelson Brooks (1960) and Paul Pimsleur both have emphasized that a prognostic test is needed which would be essentially audio-lingual. Brooks states that an aptitude test must predict the degree of success a student is likely to have in those areas of the sound system and of the systems of form and order in which the foreign language is significantly different from his mother tongue.

But in order for an aptitude test to be valid for use in our public schools, it must be easy and inexpensive to administer as well as a valid measure of aptitude. C. L. Hull in a textbook on Aptitude Testing printed nearly 40 years ago emphasized that "a method of prognosis which is not at the same time reasonably quick and reasonably inexpensive has no excuse for existence" (1928, p. 2).

F. D. Harding, Jr. recently pointed out that for these very reasons aptitude tests are better predictors of success in foreign language learning than are trial courses in the language (1958).

J. B. Carroll arrived at the conclusion that "facility in learning to speak and understand a foreign language is a fairly specialized talent (or group of talents), relatively independent of those traits ordinarily included
under 'intelligence' and that a relatively small fraction of the general population seems to have much of this talent" (1962, p. 89). One can see, therefore, that an IQ test would not be an effective predictor of talent in foreign languages.

In the writer's opinion, the Pimsleur Language Aptitude Battery meets all the requirements for a valid foreign language aptitude test. The LAB could be extremely useful in selective situations, for placement, and for prediction and diagnosis of problems. A special aptitude test is required to perform these functions in an audio-lingual foreign language program, and only one such test other than the Pimsleur LAB has appeared. It is the Modern Language Aptitude Test by J. B. Carroll and S. M. Sapon. However, the LAB, unlike the Carroll-Sapon MLAT, includes measure of the student's grade-point average and of his interest in studying a foreign language. It might be supposed that the inclusion of these pertinent pieces of information should give the LAB a higher degree of validity for school use than the MLAT, and this study will contribute evidence on this point. A description and comparison of these two audio-lingually oriented foreign language aptitude tests will be presented in Chapter II.

With the recent innovations in teaching methods and the audio-lingual approach, the LAB is potentially an
important tool for prediction and diagnosis with beginning foreign language students. Therefore, it is extremely important that its validity be determined, and that recommendations be made based on solid evidence as to its usefulness in the schools. The criterion measure for this study, the MLA-Cooperative Foreign Language Tests, is likely to be very widely used; therefore, it also is important to know whether or not the Pimsleur LAB predicts them well.

The Sample

To obtain evidence on the various points raised in connection with the Pimsleur LAB, the test was administered in September, 1964, to 173 public secondary school students in beginning (first year) French classes in Columbus, Ohio. Subsequently, in May, 1965, the MLA achievement tests were administered to these same classes. About 15% of the sample was lost because of students' absenteeism on one of the test days, for if a student missed one part of either test, he had to be eliminated from the study. The remaining 147 sets of test scores constitute the data to be analyzed in order to answer the four major questions of this study. In addition, the analysis will provide information as to the relative value of the six parts of the LAB. The entire sampling will be analyzed as a group; then only the ninth-grade students' scores will be analyzed; and lastly the sampling will be analyzed by sex.
The sample of 147 included 56 boys and 91 girls in three different schools—Brookhaven Senior High School, Crestview Junior High School, and Johnson Park Junior High School, all of which are in middle-class areas of the city.

Beginning French students in Columbus span five grades in school: eighth, ninth, tenth, eleventh, and twelfth. It is customary for students of different grade levels to be grouped heterogeneously in beginning French classes: eighth and ninth graders together in junior high school; tenth, eleventh, and twelfth graders together in high school. In this study they were tested class by class. The total sample is, therefore, heterogeneous with regard to grade level. It contained 36 eighth graders, 65 ninth graders, 25 tenth graders, 18 eleventh graders, and 3 twelfth graders. To check the effects of this heterogeneity upon the findings, the data will also be analyzed separately for the largest single grade represented, namely the ninth grade sample of 65. There may be some difference in ability among the students in different grades; those who begin a foreign language in the eighth grade must have special approval from a counselor and tend, therefore, to be more academically able. Most students who start a foreign language begin their study in the ninth grade. Those students who begin their study of French in the tenth, eleventh, or twelfth
grades often elect French as a second foreign language after having already begun the study of Spanish or Russian. There is some foreign language teaching in the elementary schools in Columbus, but it has not been coordinated or sequential.

Four different teachers were involved in this study. There was one teacher at Crestview and one at Johnson Park. But there was a change in teachers at the end of the first semester at Brookhaven Senior High. The different emphasis provided by each teacher may have affected the achievement of these students. In Columbus the foreign language program is planned on a city-wide basis. The same textbook is used in each class, and all teachers are expected to use an audio-lingual approach. But in practice each teacher has a great amount of autonomy, and from personal observations the writer believes that much traditional teaching is also done.

The sample used in this study is probably quite typical of students in many school systems throughout the country and, to the extent that this is the case, the findings obtained here may be widely applicable.
CHAPTER II

REVIEW OF RELATED LITERATURE

In this chapter a short history of aptitude testing in general and foreign language aptitude testing in particular will be presented. The nature of foreign language aptitude and the factors of which it probably consists will be discussed. The history of the Pimsleur Language Aptitude Battery will be reviewed, and a comparison will be made of the LAB with the Carroll-Sapon Modern Language Aptitude Test (MLAT).

History of Aptitude Testing

From a review of the literature on aptitude testing, one finds that the concept of specialized aptitudes and of some type of tests which can indicate in advance latent capacity, is very ancient. These ideas are mentioned repeatedly in Plato's Republic. Plato sketched very clearly a set of tests for military aptitude. According to C. L. Hull the dream conceived by the Greek philosopher was realized some twenty-three hundred years later in the United States Army mental tests (1928). Hull further states that the delay in any serious attempt to realize Plato's Utopian dream of having "each man work at a single occupation in accordance
with his natural gifts" was inevitable (1928, p. 5). It had to await the development of an experimental and scientific psychology, which was slow to come.

The first psychological laboratory was established in 1879 by William Wundt in Leipzig. But early experimental psychologists were interested in ways in which people were alike rather than different. Aptitude testing depends mainly on differential psychology. J. M. Cattell, an American student of Wundt's, indicated some interest in aptitude testing, as did the Britisher, Francis Galton. Aptitude testing had its early beginning in the 1890's with Munsterberg in the United States, Kraepelin in Germany, and Binet in France developing the first tests. The appearance of coefficients of correlation in aptitude work in 1901 at Columbia College marked the beginning of a new era in testing. (A correlation \( r \) - is a measure of the extent to which two scores, say \( X \) and \( Y \), tend to go together. Saying this another way, it is the extent to which \( Y \) may be predicted by knowing \( X \). A multiple correlation \( R \) - is the extent to which \( Y \) may be predicted from a number of \( X \)'s. Correlations vary between -1 and +1.)

A. S. Otis made one of the first attempts at group testing when the United States became involved in World War I. Since that time the military services have provided a great
stimulus for research and test development. After aptitude testing achieved great success in the military, it was quickly applied to industry, and then the movement grew toward tests for specific aptitudes.

**Foreign Language Aptitude Testing**

Evidently the first efforts to develop aptitude tests for foreign language study were made in the 1920's. Henmon (1929) was the editor of a publication summarizing this work. J. B. Carroll states that these early tests were generally of two sorts: (1) tests of ability and achievement in the English language--vocabulary, grammar, spelling, etc., and (2) work-sample testing involving short lessons or problems in the language to be studied or in an artificial language. The tests always were of the paper-and-pencil variety and emphasized "ability to deal with the intellectual, cognitive aspects of language study, that is, in the main, with the learning of a written language" (Carroll, 1962, p. 91). At that time the main objective of foreign language study in the schools was to teach the student to read (or to translate) a foreign language. The Iowa Foreign Language Aptitude Examination (Stoddard et al., 1925), the Luria-Orleans Modern Language Prognosis Test (Luria and Orleans, 1928), the George Washington University Language Aptitude Test (Hunt et al., 1929), and the Symonds
Foreign Language Prognosis Test (Symonds, 1930), predicted achievement on the basis of analytic manipulation of the written language; and they were successful in terms of the objectives of foreign language study at that time. However, they tended to have high correlations with intelligence tests, and therefore the special prognostic tests were not widely used. Carroll states that another characteristic of these early tests which probably affected their validity (either increasing or decreasing it, depending on the nature of the criterion) was that they assumed or tested certain specific prior learnings, such as the knowledge of grammatical terminology (1962).

World War II provided impetus to the development of foreign language aptitude tests for use in predicting achievement in intensive language learning courses where the spoken language is stressed as well as the written. Bottke and Milligan (1945) suggested several types of test items which might bear on aural and oral abilities, but did not publish results of any kind. Williams and Leavitt (1947) investigated the usefulness of a series of different tests in predicting success or failure in an intensive course in spoken and written Japanese. The first large-scale study of foreign language aptitude after World War II was conducted by Dorcus, Mount and Jones (1952), but the study failed to achieve satisfactorily high predictive validities. Carroll
believes that this was because the new tests just missed measuring certain abilities that are crucial in language learning (1962).

John B. Carroll and several associates engaged in a program of research during the years 1953-1958 on the measurement of aptitude for foreign language learning.

Carroll says,

The wide variations in the success achieved by various projects seeking to predict progress in learning foreign languages left us, at the outset of our project, with the feeling that there was an acute need not only for tests which would reliably predict success in different kinds of foreign language courses, but also for better knowledge of the factors making for success. Tests would be useful not only in selection, but also in guidance, placement, and research. Knowledge about factors making for success might eventually make it possible to improve teaching procedures so as to overcome some of the commoner student difficulties. . . . In any case, valid language aptitude tests would be highly useful for providing controls in experimentation on language teaching methods (1962, p. 94).

**The Nature of Foreign Language Aptitude**

Carroll (1962, p. 128) considers the factors making up language aptitude under the following headings:

1) **Phonetic coding** - the ability to "code" auditory phonetic material in such a way that this material can be recognised, identified, and remembered over something longer than a few seconds.
2) **Grammatical sensitivity** - the ability to handle "grammar," that is, the forms of language and their arrangements in natural utterances.

3) **Rote memorization ability** for foreign language materials - has to do with the capacity to learn a large number of associations in a relatively short time.

4) **Inductive language learning ability** - the ability to infer linguistic forms, rules, and patterns from new linguistic content with a minimum of supervision or guidance.

Carroll's studies show that the age of a foreign language student has nothing to do with his aptitude. Carroll also feels that the results show that verbal knowledge is not very important in predicting success. In addition, he states that "whether a person likes foreign language study is not related significantly either to aptitude or to achievement" (1962, p. 115).

Carroll achieved considerable success in predicting results of intensive language courses such as those given in the military services, but he obtained only modest validity coefficients when predicting achievement in high school and college courses (Dunkel, 1960).

Paul Pimsleur identifies foreign language aptitude in slightly different terms. Pimsleur (1962) analyzed his experimental data to arrive at the conclusion that the "talent" for learning foreign languages consists of three
components. The first is **verbal intelligence**, by which is meant both familiarity with words and the ability to reason analytically using verbal materials. It seems to the writer that verbal intelligence may be compared somewhat to Carroll's "grammatical sensitivity" and "inductive language learning ability" (see p. 15). The second and third components, according to Pimsleur, are **motivation** to learn the language and **auditory ability**.

To support the conclusion that auditory ability is important, especially in audio-lingually oriented courses, a recent study (Gabrielle and DeJesus, 1964) found that mental ability does not seem to be a primary determining factor in the learning of the aural skills of a foreign language. Auditory ability, the ability to receive and process information through the ear, is the special factor beyond intelligence and industriousness which accounts for how well an individual succeeds in a language course. It was identified in a recent study (Pimsleur et al, 1963) as the main factor differentiating normal-achievers from under-achievers in foreign language learning. Additory ability includes at least two components: sound discrimination and sound-symbol association. Sound discrimination is the ability to remember sounds and their significance and may be compared, in this writer's opinion, to Carroll's "phonetic coding." Sound-symbol association is the ability to associate
sounds with their written forms accurately and rapidly. It is clear that auditory ability influences a student's success in foreign language learning. But many questions, such as whether this ability can be affected by training, remain to be answered.

Pimsleur et al. also found that "a student's motivation goes hand-in-hand with his achievements" (1963, p. 43). Pimsleur and Lambert et al (1961) both arrived at this conclusion, but Carroll felt that motivation played a small predictive role in intensive language courses. However, it must be admitted that evidence is not clear whether motivation is a cause or an effect of students' experiences in the language class.

**Pimsleur Language Aptitude Battery**

The study which resulted in Pimsleur's LAB began in 1959 when the linguist Robert Stockwell and Paul Pimsleur itemized the various factors which might be related to an individual's success in foreign language learning. They designed tests to measure each of these hypothetical factors in as specific a manner as possible and subsequently tried these tests out on college French students. The tests which seemed most promising were later administered to students at the secondary level in French and Spanish.
Pimsleur arrived at the tentative conclusion from his findings that achievement of the traditional (grammar, reading, writing) objectives of foreign language courses involves primarily verbal intelligence and motivation on the student's part. However, to predict satisfactorily oral-aural achievement in an audio-lingually oriented language course, the factor of auditory ability must also be tested.

In accordance with this theory, the LAB consists of six parts, each with a definite purpose or aptitude factor to measure. The six parts are as follows:

1) **Grade-point Average** - (GPA) Success in other school courses has been shown to be a good predictor of success in language study, especially in a traditional course taught the same way as other school subjects, as a body of information to be learned rather than a skill to be acquired. Pimsleur et al found that GPA could correlate as high as .62 with foreign language grades. However, when GPA was used in conjunction with an aptitude battery containing auditory tests, the correlation rose to .72, a significant increase in the accuracy of prediction (1963).

2) **Interest** - Motivation may be one of the three major factors affecting success in the study of a foreign language. In this section of the test, the students indicate their interest in studying a modern foreign language on a scale ranging from A, strongly interested, to E, rather uninterested.
3) **Vocabulary** - This section of the LAB measures a student's familiarity with English words, a part of his verbal intelligence.

4) **Language Analysis** - This section measures the ability to reason analytically using verbal materials, the second part of verbal intelligence.

5) **Sound Discrimination** - This part measures the ability to remember sounds and their significance, one aspect of auditory ability. It is presented on magnetic tape and utilizes Éwé, an African dialect.

6) **Sound-Symbol Association** - This part of the LAB measures the ability to associate sounds with their written forms accurately and rapidly, the second aspect of auditory ability. It, also, is presented on magnetic tape.

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**A Comparison of the Pimsleur Language Aptitude Battery and the Carroll-Sapon Modern Language Aptitude Test**

Only one test other than Pimsleur's has been published which predicts who will be proficient at understanding and speaking a language. That is the *Modern Language Aptitude Test* by Carroll and Sapon (1958, 1959). The MLAT consists of the following five parts:

1) **Number Learning** - seems to measure one aspect of the memory component of foreign language aptitude, but also has a fairly large specific variance which might be a special "auditory alertness" factor which would play a role in auditory comprehension of a foreign language.
2) **Phonetic Script** - appears to measure sound-symbol association ability, that is, the ability to learn correspondences between speech sounds and orthographic symbols. This section may also measure a sort of memory for speech sounds, and it tends, according to its authors, to correlate highly with the ability to mimic speech sounds and sound combinations in foreign languages.

3) **Spelling Clues** - depends to some extent on the student's English vocabulary knowledge. It also measures sound-symbol association, but to a lesser degree than part two.

4) **Words in Sentences** - thought to measure sensitivity to grammatical structure.

5) **Paired Associates** - measures the rote memory aspect of the learning of foreign languages.

All five parts of the MLAT require 60 to 70 minutes of testing time. There is also a short form, consisting only of the last three parts and omitting the auditory section, which requires 30 to 45 minutes of testing time.

The six parts of the Pimsleur LAB take about 40 minutes to administer.

**Reliability** concerns the accuracy of a measuring device. Other things being equal, the longer a test is, the more reliable it will be. The **reliabilities** of the five parts of the Carroll-Sapon MLAT, as administered to
ninth, tenth, and eleventh graders, are reported in the test manual to vary from a low of .55 for part two, to a high of .89 for part five. The median reliability is approximately .86.

For the Pimsleur LAB, using a sample of 100 junior and senior high school students, the reliability of part three, Vocabulary, was .91; of part four, Language Analysis, was .71; of part six, Sound-Symbol Association, was .32. Part five, Sound Discrimination, is new to the Battery, with the African dialect Ewe replacing a similar test using the Chinese language. The former test had a reliability of .73. These figures reflect the relative shortness of each sub-test since, other things being equal, the longer a test is, the more reliable it will be. Pimsleur believes that it is worth sacrificing a little reliability for the advantage of being able to administer the entire Battery in one class period.

Validity has to do with how well a test actually measures what it purports to measure—in this case, language aptitude. The writer intends to estimate the validity of the Pimsleur LAB by correlating the test scores on it with the students' test scores on the MLA-Cooperative French Tests; such figures are called validity coefficients. A comparison of the validity of the LAB and the MLAT will be deferred until Chapter IV when the data collected during this
validation study will be analyzed. Suffice it to say that the MLAT and LAB are approximately equal as predictive instruments if parts one and two of the LAB are ignored. However, the inclusion in the LAB of Grade-point Average and an indication of Interest may give it an important degree of extra predictive validity.

Both tests are equally easy to administer with reusable test booklets, magnetic tapes, answer sheets, and answer keys.

Carroll (1962, p. 103) has data supporting the "hypothesis of the non-specificity of language aptitude;" that is, he has evidence that language aptitude is applicable to any type of foreign language. Therefore, both the MLAT and the LAB may be useful predictors for all language courses. It also appears that previous language training does not ordinarily affect scores on the tests.
CHAPTER III
PROCEDURES FOLLOWED IN THIS STUDY

Chapter III will outline the steps the writer followed in pursuing this research and collecting the necessary data to validate the Pimsleur Language Aptitude Battery.

Collection of the Data

The LAB was administered to nearly 200 beginning French students over a two-week period in September, 1964. As stated before, these students were in two junior highs and one senior high school.

The six parts of the LAB require only about 40 minutes to administer, but this writer found it better to use two class periods rather than one. (The regular classroom teacher always took time to introduce the tester, and the tester felt it necessary to explain a little about the experiment being conducted. This writer believes, however, that a regular classroom teacher could administer the Battery in one class period.) The first four parts of the Battery (Grade-point Average, Interest, Vocabulary, and Language Analysis) were administered the first day. The last two parts (Sound Discrimination and Sound-Symbol Association) were administered the second day.

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The students were asked to put the following biographical data at the top of their answer sheets: name, age, sex, grade, school, teacher, and any previous experience in the study of a foreign language.

The biographical data and a separate score for each part of the LAB were recorded on charts with space left to add the results of the achievement testing.

The Modern Language Association Cooperative French Tests, Form LA, were administered over a three-week period in May, 1965, to those same students who took the LAB in September. These are standardized achievement tests and served as the criteria by which to measure the predictive ability of the Pimsleur LAB. They should represent a valid criterion measure of achievement because they have been recently developed for use with the new teaching methods.

The MLA Cooperative French Tests, Form LA, are for first and second-year French students in junior and senior high schools and first-year college French students. The entire test consists of four parts:

1) Reading - Students read a number of very short passages and choose after each the multiple choice answer which best fits the meaning of the passage. This section requires 35 minutes or one class period to administer.

2) Writing - In this section students fill in omitted words, change the tense of sentences, change the number and/or
gender of sentences, and write a short, directed dialogue. It requires 35 minutes or one class period to administer.

3) Listening - Students listen to a French voice on magnetic tape and then choose the correct multiple choice response. This requires 25 minutes to administer.

4) Speaking - Students listen to a French voice on magnetic tape and repeat sentences, read a passage, answer questions, and describe pictures - all in French. This part requires 10 to 15 minutes to administer to each student taking it, or if laboratory facilities are available the speaking test may be administered to an entire class at once. The speaking section of the MLA French Tests was administered individually to 54 students at Brookhaven High School. (Of the 54 tested, only 46 scores could be used in the final analysis because of students' absences on other test days.) A conference room and tape recorder were placed at the writer's disposal. By testing during students' study periods, the writer completed administering the speaking test in four days.

The tests were scored by the writer, an experienced French teacher, according to directions in the MLA Test Manual. The scores were then added to the charts already containing the biographical data and the scores from the Pimsleur Language Aptitude Battery. The data available on the charts now consisted of biographical data (name, school,
sex, and grade), six predictor variables (the LAB scores -
GPA, Interest, Vocabulary, Language Analysis, Sound
 Discrimination, and Sound-Symbol Association), and three or
four criterion variables (the MLA French Test scores - Read-
ing, Writing, Listening, and in some cases Speaking).

This data was coded where necessary (Masculine = 0,
Feminine = 1; Grade 8 = 1, 9 = 2, 10 = 3, 11 = 4, and 12 =
5; Interest A = 4, B = 3, C = 2, D = 1) and keypunched onto
IBM cards by the writer at The Ohio State University Research
Foundation's Computer Center.

Method of Analysis

The IBM 7094 computer using the MR-90 program (The
Ohio State University Computer Center Multiple-Regression
Program) was used for all of the analyses. In order to
receive the answers to the four major questions of the study
(How well does the LAB predict achievement in reading,
writing, understanding, and speaking French?) and to analyze
the data further according to sex differences and the ninth-
grade alone, it was necessary to set up five separate
problems for the computer.

Problem I - A multiple regression equation was
developed for predicting each of the three dependent or
criterion variables (the MLA Reading, Writing, and Listening
Test scores) based on the six independent or predictor
variables (the LAB scores) and using the total population
sample of 147 students.
In developing the multiple regression equations, the computer provided multiple correlation coefficients between the LAB and the three MLA Tests. Validity coefficients were also computed to determine to what extent each one of the six LAB scores predicted achievement on each of the three MLA Tests.

**Problem II** - A multiple regression equation was developed for predicting the fourth criterion variable, the MLA Speaking Test score, based on the six predictor variables and using the 46 Brookhaven students' scores. A multiple coefficient of correlation between the LAB and the Speaking Test was computed, and individual validity coefficients were computed to determine how well each part of the LAB predicted achievement on the Speaking Test.

**Problem III** - Multiple coefficients of correlation and regression equations were developed for the Reading, Writing, and Listening Tests using only the 65 ninth graders involved in the study.

**Problem IV** - Multiple regression equations and multiple correlation coefficients were developed for predicting Reading, Writing, and Listening Test scores using the 91 female students' scores and then the 56 male students' scores.

**Problem V** - The 46 Brookhaven students were also separated by sex (38 female and 8 male), and multiple
coefficients of correlation and regression equations were developed for the Speaking Test for the two groups.

Chapter IV presents the results of these computations and a discussion of the conclusions.
CHAPTER IV

RESULTS AND CONCLUSIONS

This chapter presents an analysis of the results of the study and a discussion of the conclusions. The data is presented in four sections to correspond with the major questions to be answered. The questions are (1) How well does the LAB predict achievement in the reading of French? (2) How well does the LAB predict achievement in the writing of French? (3) How well does the LAB predict achievement in understanding spoken French? (4) How well does the LAB predict achievement in speaking French? Additional findings are then presented by analyzing the ninth-grade sample alone and by analyzing the entire sample according to sex. A comparison of the validity of the Carroll-Sapon MLAT and the Pimsleur LAB and a summary of the findings of the study conclude this chapter.

Question 1

How well does the LAB predict achievement in the reading of French? The multiple correlation between the LAB and the MLA Reading Test was .476, neither a high nor a low correlation.1

30

1Multiple correlation coefficients reported here are uncorrected for shrinkage. The correction would be negligible (approximately .01), since the sample size is fairly large and the number of predictors is small.
Table 2 shows the intercorrelations between all parts of the LAB and MLA Tests. The means and standard deviations for each part of the LAB and MLA Tests are also given. These statistics are all based on the population sample of 147 students except for those figures relating to the MLA Speaking Test. As explained in Chapter III, the population sample for the MLA Speaking Test was 46.

Table 3 shows the correlation coefficients for the six parts of the LAB with the four parts of the MLA Test. These have been taken from the complete table of intercorrelations (Table 2) so that they might be referred to easily.

Of the six parts of the LAB, the Vocabulary section, as might be expected, had the highest correlation (.38) with the Reading Test. As shown in Table 3, the Sound-Symbol Association (.28), Grade-point Average (.26), and Interest (.23) also correlated fairly well. Indeed, all six predictors correlated significantly (at the .05 level) with the Reading criterion.

The multiple regression equation to be used for predicting Reading Test scores from the LAB is as follows:

\[ Y_1 = 1.10X_1 + 1.52X_2 + .37X_3 + .02X_4 + .08X_5 + .12X_6 + .24. \]

\[ ^{1}\text{In this and subsequent regression equations, the symbols used are as follows:} \]
\[ Y_1 = \text{MLA Reading Test} \quad X_1 = \text{Grade-point Average (GPA)} \]
\[ Y_2 = \text{MLA Writing Test} \quad X_2 = \text{Interest} \]
\[ Y_3 = \text{MLA Listening Test} \quad X_3 = \text{Vocabulary} \]
\[ Y_4 = \text{MLA Speaking Test} \quad X_4 = \text{Language Analysis (L.A.)} \]
\[ X_5 = \text{Sound Discrimination (S.D.)} \]
\[ X_6 = \text{Sound-Symbol Association (S-S.A.)} \]


<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
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</thead>
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<td>-.01</td>
<td>-.05</td>
<td>.04</td>
<td>.23</td>
<td>.16</td>
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<td>.35</td>
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<td>.44</td>
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<td>.50</td>
<td>.18</td>
<td>.38</td>
<td></td>
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<td>.28</td>
<td>.18</td>
<td>.41</td>
<td>.31</td>
<td>.01</td>
<td>.34</td>
<td></td>
</tr>
<tr>
<td>S.D.</td>
<td>1.00</td>
<td>.32</td>
<td>.16</td>
<td>.31</td>
<td>.46</td>
<td>.20</td>
<td>.64</td>
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<td></td>
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<td>.57</td>
<td>.65</td>
<td>.59</td>
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<tr>
<td>Listen</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speak.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>2.60</td>
<td>3.14</td>
<td>11.70</td>
<td>7.15</td>
<td>19.79</td>
<td>18.78</td>
<td>16.17</td>
<td>19.44</td>
<td>14.69</td>
</tr>
<tr>
<td>S.D.</td>
<td>.76</td>
<td>.66</td>
<td>4.01</td>
<td>3.54</td>
<td>4.09</td>
<td>4.68</td>
<td>5.49</td>
<td>12.40</td>
<td>5.44</td>
</tr>
</tbody>
</table>

3 Coefficients in excess of .14 are statistically significant at the .05 level. Those in excess of .19 are statistically highly significant at the .01 level.

2 N=46.
<table>
<thead>
<tr>
<th>LAB</th>
<th>Reading</th>
<th>Writing</th>
<th>Listening</th>
<th>Speaking</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPA</td>
<td>.26</td>
<td>.48</td>
<td>.23</td>
<td>.14</td>
</tr>
<tr>
<td>Interest</td>
<td>.23</td>
<td>.16</td>
<td>.19</td>
<td>.35</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>.38</td>
<td>.50</td>
<td>.18</td>
<td>.38</td>
</tr>
<tr>
<td>L.A.</td>
<td>.18</td>
<td>.41</td>
<td>.01</td>
<td>.34</td>
</tr>
<tr>
<td>S.D.</td>
<td>.16</td>
<td>.31</td>
<td>.04</td>
<td>.34</td>
</tr>
<tr>
<td>S-S.A.</td>
<td>.28</td>
<td>.46</td>
<td>.20</td>
<td>.64</td>
</tr>
</tbody>
</table>

1Coefficients in excess of .14 are statistically significant at the .05 level. Those in excess of .19 are statistically highly significant at the .01 level.

2N=147.

**Question 2**

How well does the LAB predict achievement in the writing of French? The multiple correlation between the LAB and the MLA Writing Test was .706. This high correlation may be attributed to several factors. The MLA Writing test is the most reliable of the four MLA Tests, though by only a small margin. Also, it is very likely that the traditional goal of writing is still being stressed most in the schools, and therefore everything correlates best with it.

The Vocabulary section had the highest correlation (.50) with the MLA Writing Test, with GPA (.48), Sound-Symbol Association (.46), and Language Analysis (.41) also...
contributing a great deal (see Table 3). In fact, once again all six predictors correlated significantly (at the .05 level) with the Writing criterion.

The multiple regression equation to be used for predicting Writing Test scores from the LAB is as follows:

\[ Y_2 = 5.50X_1 + 1.74X_2 + .76X_3 + .70X_4 + .34X_5 + .48X_6 - 29.88. \]

The writer believes that the LAB does an excellent job of predicting achievement in the writing of French with all six parts contributing significantly to the high predictive ability.

**Question 3**

How well does the LAB predict achievement in understanding spoken French? The multiple correlation between the LAB and the MLA Listening Test was only .338. This rather low correlation makes the writer question the appropriateness of the MLA Listening Test for this particular sample. When administering the Listening Test, the writer noted the rapidity of the spoken French. None of those tested had had any contact with a native teacher of French, and many of them appeared to become flustered and to "give up." The listening comprehension ability of first-year French students is limited to those set patterns which they have already learned in class, and very few of these patterns were included on the MLA Listening Test. Moreover, the test
required them to choose from among four printed alternatives, a task which may have been beyond their rather low-level reading ability.

Four parts of the LAB--Grade-point Average, Sound-Symbol Association, Interest, and Vocabulary--correlated significantly (at the .01 level) with the Listening Test (see Table 3).

The multiple regression equation to be used for predicting Listening Test scores from the LAB is as follows:

\[ Y_3 = 1.22X_1 + 1.22X_2 + 1.15X_3 - 1.13X_4 - 0.02X_5 + 0.16X_6 + 4.20. \]

**Question 4**

How well does the LAB predict achievement in speaking French? The multiple correlation between the LAB and the MLA Speaking Test was .704. The writer believes that this high correlation shows the value of the LAB for use in a modern, audio-lingual language program.

The multiple correlation between the LAB and the Speaking Test was derived using a population sample of only 46 students as compared to the sample of 147 used with the Reading, Writing, and Listening Tests.

Of the six parts of the LAB, Sound-Symbol Association had the highest correlation (.64) with the Speaking Test (see Table 3). Interest, Vocabulary, Language Analysis, and Sound Discrimination all had correlations in the .30's. Grade-point Average had a correlation of only .14 with the
Speaking Test, pointing up the fact that speaking a foreign language is a talent separate from those abilities required in most other school subjects.

The multiple regression equation to be used for predicting Speaking Test scores from the LAB is as follows:
\[ Y = 0.66X_1 + 2.62X_2 - 0.06X_3 + 0.34X_4 + 0.20X_5 + 1.09X_6 - 12.33. \]

**Additional Findings**

**Ninth-Grade Sample** - Since the sixty-five students in the ninth grade constituted the largest group of any single grade-level tested, the data on these students was analyzed separately.

Table 4 compares the multiple correlations of the ninth-grade sample with those of the entire population sample, and Table 5 compares the mean scores on both the LAB and the MLA Tests of the ninth-grade group with those of the entire group.

**TABLE 4**

**MULTIPLE CORRELATIONS OF NINTH-GRADE SAMPLE AND OF ENTIRE SAMPLE**

<table>
<thead>
<tr>
<th>Item</th>
<th>Ninth Grade N=65</th>
<th>Entire Sample N=147</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLA Reading Test</td>
<td>R= .429</td>
<td>R= .476</td>
</tr>
<tr>
<td>MLA Writing Test</td>
<td>R= .511</td>
<td>R= .706</td>
</tr>
<tr>
<td>MLA Listening Test</td>
<td>R= .277</td>
<td>R= .338</td>
</tr>
</tbody>
</table>
TABLE 5
MEAN SCORES ON THE LAB AND THE MLA TESTS

<table>
<thead>
<tr>
<th>Tests</th>
<th>Ninth Grade</th>
<th>Entire Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=65</td>
<td>N=147</td>
</tr>
<tr>
<td>LAB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPA</td>
<td>2.35</td>
<td>2.60</td>
</tr>
<tr>
<td>Interest</td>
<td>3.15</td>
<td>3.14</td>
</tr>
<tr>
<td>Vocab.</td>
<td>10.63</td>
<td>11.70</td>
</tr>
<tr>
<td>L.A.</td>
<td>5.78</td>
<td>7.15</td>
</tr>
<tr>
<td>S.D.</td>
<td>19.11</td>
<td>19.79</td>
</tr>
<tr>
<td>S-S.A.</td>
<td>17.68</td>
<td>18.78</td>
</tr>
<tr>
<td>MLA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>14.72</td>
<td>16.17</td>
</tr>
<tr>
<td>Writing</td>
<td>13.51</td>
<td>19.44</td>
</tr>
<tr>
<td>Listening</td>
<td>14.37</td>
<td>14.69</td>
</tr>
</tbody>
</table>

As can be seen from Table 4, the ninth-grade sample had lower multiple correlations between the LAB and the three MLA Tests than did the entire sample. The largest difference was in the multiple correlation with the Writing Test where the ninth-graders correlated .511 and the entire sample correlated .706.

Table 5 shows that the ninth-graders received lower mean scores on nearly all parts of the LAB. Their grade-point average is slightly lower than that for the entire group; only their indication of Interest in studying a foreign language is slightly higher than the mean for the entire group.
Table 5 also shows that the ninth-graders received lower mean scores on the three MLA Tests than did the entire sample with the biggest difference being shown in the Writing Test - 13.51 as compared to 19.44 for the entire sample.

These lower scores for the ninth-graders could be expected since anyone may begin a foreign language in the ninth grade in Columbus, but special permission has to be granted to those beginning their study at any other grade level.

Table 6 gives all the intercorrelations of the LAB scores and the MLA Test Scores for the ninth-grade sample.

Division of Sample by Sex - The entire sample was also divided into two groups, male and female, to see if there were any significant differences in the data according to sex.

Table 7 shows the coefficients of correlation obtained for the ninety-one female students and the fifty-six male students.

It can be observed from Table 7 that the female group had higher multiple correlations with all three of the MLA Tests than did the male group. It may be noted that the girls had a good multiple correlation between the IAB and the MLA Listening Test (.442), but the boys' extremely low correlation (.269) pulls the multiple correlation for the entire sample down.
### Table 6

**Intercorrelations of the Lab Scores and the MLA Test Scores for the Ninth-Grade Sample**

N=65

<table>
<thead>
<tr>
<th>Tests</th>
<th>GPA</th>
<th>Int.</th>
<th>Vocab.</th>
<th>L.A.</th>
<th>S.D.</th>
<th>S-S.A.</th>
<th>Reading</th>
<th>Writing</th>
<th>Listening</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAB:GPA</td>
<td>1.00</td>
<td>.04</td>
<td>.25</td>
<td>.13</td>
<td>.11</td>
<td>.20</td>
<td>.11</td>
<td>.32</td>
<td>.36</td>
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<tr>
<td>Int.</td>
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<td></td>
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<td></td>
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<tr>
<td>Vocab.</td>
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<td></td>
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<tr>
<td>L.A.</td>
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<tr>
<td>S.D.</td>
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<td></td>
<td></td>
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<tr>
<td>S-S.A.</td>
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<tr>
<td>MLA:Read</td>
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<td>Listen</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean: 2.35 3.15 10.63 5.78 19.11 17.68 14.72 13.51 14.37

S.D.: .76 .69 3.45 2.80 4.40 4.63 4.59 7.14 4.76

1Coefficients in excess of .20 are statistically significant at the .05 level. Those in excess of .28 are statistically highly significant at the .01 level.
TABLE 7

CORRELATION COEFFICIENTS FOR THE ENTIRE LAB AND FOR THE SIX PARTS OF THE LAB WITH MLA TEST SCORES FOR MALE AND FEMALE STUDENTS

<table>
<thead>
<tr>
<th>Item</th>
<th>Reading Test</th>
<th></th>
<th>Writing Test</th>
<th></th>
<th>Listening Test</th>
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<td></td>
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<td>Male Female</td>
<td>Male Female</td>
<td>Male Female</td>
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<tr>
<td></td>
<td>N=56 N=91</td>
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<td>N=56 N=91</td>
<td>N=56 N=91</td>
<td>N=56 N=91</td>
<td></td>
</tr>
<tr>
<td>Entire LAB</td>
<td>r=.412 r=.543</td>
<td>R=.628 R=.722</td>
<td>R=.269 R=.442</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>GPA</td>
<td>r=.08 r=.34</td>
<td>r=.42 r=.47</td>
<td>r=.10 r=.29</td>
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<td></td>
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<tr>
<td>Interest</td>
<td>.32 .16</td>
<td>.24 .04</td>
<td>.24 .15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocabulary</td>
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<td>.29 .53</td>
<td>- .004 .28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L.A.</td>
<td>.02 .22</td>
<td>.16 .43</td>
<td>.01 -.01</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>S.D.</td>
<td>.08 .18</td>
<td>.27 .30</td>
<td>-.06 .10</td>
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<tr>
<td>S-S.A.</td>
<td>.15 .33</td>
<td>.40 .45</td>
<td>.02 .29</td>
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</table>

Table 8 shows that the girls did better on all six parts of the LAB and on all four parts of the MLA Tests than did the boys.

TABLE 8

MEANS AND STANDARD DEVIATIONS FOR THE LAB AND MLA TESTS

<table>
<thead>
<tr>
<th>Test</th>
<th>Mean</th>
<th>Standard Deviation</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Male N=56</td>
<td>Female N=91</td>
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<td>LAB</td>
<td></td>
<td></td>
</tr>
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<td>GPA</td>
<td>2.45 2.69</td>
<td>2.60 .71 .78 .76</td>
</tr>
<tr>
<td>Int.</td>
<td>2.98 3.24</td>
<td>3.14 .72 .60 .66</td>
</tr>
<tr>
<td>Vocab</td>
<td>10.27 12.58</td>
<td>11.70 3.80 3.91 4.01</td>
</tr>
<tr>
<td>L.A.</td>
<td>5.80 7.98</td>
<td>7.15 3.04 3.59 3.54</td>
</tr>
<tr>
<td>S.D.</td>
<td>19.11 20.21</td>
<td>19.79 4.24 3.96 4.09</td>
</tr>
<tr>
<td>S-S.A.</td>
<td>17.79 19.38</td>
<td>18.78 4.43 4.75 4.68</td>
</tr>
<tr>
<td>MLA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read</td>
<td>15.57 16.54</td>
<td>16.17 4.96 5.78 5.49</td>
</tr>
<tr>
<td>Write</td>
<td>14.41 22.54</td>
<td>19.44 9.76 12.87 12.40</td>
</tr>
<tr>
<td>Listen</td>
<td>14.41 14.86</td>
<td>14.69 5.12 5.65 5.44</td>
</tr>
<tr>
<td>Speak</td>
<td>24.12 24.90</td>
<td>24.76 3.64 9.41 8.66</td>
</tr>
</tbody>
</table>

^1 Based on sample of 46 (38 female and 8 male).
The writer believes that very often girls of junior and senior high-school age apply themselves better than the boys of the same age and, in this instance, tried to do better on the MLA Achievement Tests than did the boys. Their higher mean scores seem to reiterate the belief that girls do better than boys in high-school language courses.

Tables 9 and 10 give all the intercorrelations of the LAB scores and the MLA Test scores for the male and female groups.

Validity of the Carroll-Sapon MLAT and the Pimsleur LAB

As reported in the test manual, the MLAT was correlated against course grades of eighteen groups of French, Spanish, and German students in grades nine to eleven. The eighteen validity coefficients ranged from .25 to .78; the median figure was .53. The average validity coefficient obtained in this study of .556 for the LAB with the MLA-Cooperative French Tests as criteria may be considered equally good. The LAB used in a previous study with a similar group of junior and senior high-school students, yielded a coefficient of .71 with teacher grades as the criterion. All of the MLAT figures were based on teacher grades, which are notably less reliable than cooperative tests, standardized instruments of generally high reliability.
TABLE 9
INTERCORRELATIONS OF THE LAB SCORES AND THE
MLA TEST SCORES FOR THE MALE SAMPLE

N=56

<table>
<thead>
<tr>
<th>Tests</th>
<th>GPA</th>
<th>Int.</th>
<th>Vocab.</th>
<th>L.A.</th>
<th>S.D.</th>
<th>S-S.A. Reading</th>
<th>Writing</th>
<th>Listen</th>
<th>Speak²</th>
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<td>.16</td>
<td>.08</td>
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<td>.01</td>
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<td>.08</td>
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<td>.02</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Speak²</td>
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<td>.00</td>
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</table>

Mean  2.45  2.98  10.27  5.80  19.11  17.79  15.57  14.41  14.41  24.12
S.D.  .71   .72   3.80   3.04  4.24   4.43   4.96   9.76   5.12   3.64

¹Coefficients in excess of .22 are statistically significant at the .05 level.
Those in excess of .31 are statistically highly significant at the .01 level.

²N=8.
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<th>Vocab.</th>
<th>L.A.</th>
<th>S.D.</th>
<th>S-S.A. Reading</th>
<th>Writing</th>
<th>Listen</th>
<th>Speak²</th>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Speak²</td>
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<td></td>
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<tr>
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<td>3.24</td>
<td>12.58</td>
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</table>

¹Coefficients in excess of .17 are statistically significant at the .05 level. Those in excess of .24 are statistically highly significant at the .01 level.

²N=38.
Summary of Results

With validity coefficients of .476 for the MLA Reading Test, .706 for the MLA Writing Test, .338 for the MLA Listening Test, and .704 for the MLA Speaking Test, we may assume that the Plusleur Language Aptitude Battery is a valid prognostic test for beginning French students. It predicts very well both the skill of writing and the audio-lingual skill of speaking the language.
CHAPTER V

SUMMARY OF STUDY AND RECOMMENDATIONS

With the prevalent emphasis placed on the study of foreign languages, an aptitude test was needed to predict which students would do better than others in learning a foreign language and perhaps even to diagnose the problems of those who show low aptitude for the study of foreign languages.

The modern trend is to teach foreign languages audio-lingually, that is, listening comprehension and speech are the primary goals of foreign language teaching with reading and writing coming later. Therefore, for an aptitude test to be worthwhile, it must predict ability in the audio-lingual areas of listening comprehension and speech as well as in the traditional areas of reading and writing a foreign language.

The Pimsleur Language Aptitude Battery is a prognostic test which appears to meet these requirements. It consists of six parts—Grade-point Average, an indication of Interest in studying a foreign language, Vocabulary, Language Analysis, Sound Discrimination, and Sound-Symbol
Association. It was thought that the inclusion of Sound Discrimination and Sound-Symbol Association would give the battery strong predictive ability in the audio-lingual areas. It was presumed that the inclusion of Grade-point Average and Interest would raise the battery's predictive ability in all areas. Therefore, the writer undertook this study to validate the Pimsleur LAB for predicting the achievement of students in beginning French classes.

The criterion used to measure the achievement of the first-year French students was the Modern Language Association Cooperative French Test, a standardized achievement test recently developed for use in audio-lingual language programs. The MLA Tests consist of four parts a Reading Test, Writing Test, Listening Test, and Speaking Test. The Pimsleur LAB was to be correlated with each one of these parts.

The LAB was administered in September, 1964, to 147 first-year French students in junior and senior high schools of Columbus, Ohio. The MLA Achievement Tests were administered to these same classes in May, 1965. Both sets of tests were scored by the writer, an experienced French teacher, and the data was processed at the Ohio State University Computer Center. The Multiple-Regression Program was used for all of the statistical computations and analyses.
It was found that the Pimsleur LAB correlates as follows with each of the four parts of the MLA Cooperative French Test: (1) $R=0.476$ with the Reading Test, (2) $R=0.706$ with the Writing Test, (3) $R=0.338$ with the Listening Test, and (4) $R=0.704$ with the Speaking Test.

The net outcome of the study is validation of the Pimsleur Language Aptitude Battery, at least for use with beginning French students.

However, much further research remains to be done. The Pimsleur LAB should be validated with other criteria and with other population samples. Only 147 French students were used in this study. A much larger population sample needs to be studied, and the research should be extended to other foreign languages. Other factors such as I.Q. and teacher grades might be included in future research.
APPENDIX A

Mean Scores for Local and National Sample
Student Populations on the MLA-Cooperative French Tests
# Mean Scores for Local and National Sample

Student Populations on the MLA-Cooperative French Tests

<table>
<thead>
<tr>
<th>Test</th>
<th>National Mean</th>
<th>Local Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Audio-Lingual</td>
<td>Traditional</td>
</tr>
<tr>
<td>MLA, Form LA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Writing</td>
<td>21</td>
<td>25</td>
</tr>
<tr>
<td>Listening</td>
<td>16</td>
<td>--</td>
</tr>
<tr>
<td>Speaking</td>
<td>31</td>
<td>--</td>
</tr>
</tbody>
</table>
APPENDIX B

The Pimsleur Language Aptitude Battery

(reprinted by permission of Harcourt, Brace & World, Inc.)
TEST BOOKLET

for use as instructed by the tape

DO NOT OPEN until told to do so by the tape!
(you will not need this booklet until part 3 of the test)

PIMSLEUR LANGUAGE APTITUDE BATTERY

by Paul Pimsleur

Part 3: Vocabulary

SAMPLE

prolonged
A. prompt
B. decreased
C. difficult
D. extended

DO NOT TURN THE PAGE YET

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51
Vocabulary

1. vivacious
   A. docile
   B. pretty
   C. lively
   D. glum

7. loquacious
   A. talkative
   B. beautiful
   C. tall
   D. sweet

13. benevolent
    A. courteous
    B. violent
    C. charitable
    D. boring

19. mediocre
   A. excellent
   B. slow
   C. unusual
   D. average

2. humiliated
   A. mortified
   B. hated
   C. lost
   D. hungry

8. jovial
   A. somber
   B. fatigued
   C. satisfied
   D. merry

14. enervated
    A. happy
    B. energetic
    C. weak
    D. strong

20. dissent
    A. go down
    B. defend
    C. disappear
    D. disagree

3. durable
   A. doubtful
   B. new
   C. unsatisfactory
   D. lasting

9. adroit
   A. skillful
   B. brilliant
   C. careless
   D. slow

15. wanes
    A. decreases
    B. increases
    C. disappears
    D. continues

21. exhilarated
    A. stimulated
    B. satiated
    C. dejected
    D. expendable

4. smug
   A. self-satisfied
   B. friendly
   C. uncertain
   D. unhappy

10. vigorous
    A. weak
    B. sickly
    C. strong
    D. vigilant

16. capricious
    A. austere
    B. steady
    C. changeable
    D. sedate

22. unpretentious
    A. pompous
    B. modest
    C. indignant
    D. concealed

5. fruitless
   A. ineffectual
   B. successful
   C. profitable
   D. intentional

11. malicious
    A. thirsty
    B. beneficial
    C. wicked
    D. charitable

17. vociferous
    A. loud
    B. sedate
    C. vengeful
    D. timid

23. chastised
    A. coaxed
    B. chosen
    C. chivalrous
    D. punished

6. ludicrous
   A. detailed
   B. brilliant
   C. lengthy
   D. absurd

12. hilarious
    A. lengthy
    B. dull
    C. boisterous
    D. extemperaneous

18. grotesque
    A. luminous
    B. mythical
    C. unique
    D. distorted

24. abating
    A. spreading
    B. increasing
    C. decreasing
    D. beginning

DO NOT READ AHEAD
If time remains, check your work
Part 4: Language Analysis

Instructions:

Just below, you are given a list of words in a foreign language. By referring attentively to this list, you should be able to draw conclusions as to how other things are said in this language. Try this problem.

<table>
<thead>
<tr>
<th>gade</th>
<th>father, a father</th>
</tr>
</thead>
<tbody>
<tr>
<td>shi</td>
<td>horse, a horse</td>
</tr>
<tr>
<td>gade shir le</td>
<td>father sees a horse</td>
</tr>
</tbody>
</table>

Using this list figure out how to say:

A horse sees father

Don't read any further until you have figured out an answer for yourself.

Have you figured out an answer? The correct answer is: shi gader le. Notice particularly the final r; it is added to whichever word receives the action in the sentence. If you did not get the item correct, go back and figure it out. You may NOT ask questions.

There will be 15 questions like this on the test. Give your answers on the separate answer sheet, as instructed.

DO NOT TURN THE PAGE UNTIL YOU ARE TOLD TO DO SO.
gade          father, a father  
shi          horse, a horse  
gade shir le          father sees a horse  
gade shir la          father saw a horse  
be          carries  

How would you say in this language:

1. **Father carries a horse.**  
   (a) gade shir be  (b) gade shir ba  (c) shi gader be  (d) shi gader ba  

2. **Father carried a horse.**  
   (a) gade shir be  (b) gade shir ba  (c) shi gader be  (d) shi gader ba  

3. **A horse carries father.**  
   (a) gade shir be  (b) gade shir ba  (c) shi gader be  (d) shi gader ba  

4. **A horse carries father.**  
   (a) gade shir be  (b) gade shir ba  (c) shi gader be  (d) shi gader ba  

Here is the same list with some additional information. Answer the following questions on the basis of this list.

gade          father, a father  
shi          horse, a horse  
gade shir le          father sees a horse  
gade shir la          father saw a horse  
be          carries  
so          I, me  
wo          you  
sowle          I see a horse  
so shir lem          I don't see a horse  

5. **You carry me.**  
   (a) sowle  (b) sowbe  (c) wosle  (d) wosbe  

6. **You saw father.**  
   (a) wo gader le  (b) so gader le  (c) so gader la  (d) wo gader la  

7. **I carried you.**  
   (a) wosba  (b) sowbe  (c) sowla  (d) sowba  

8. **You carried father.**  
   (a) wo gader ba  (b) wo gader be  (c) wo gade ba  (d) so gade be  

9. **You saw me.**  
   (a) sowla  (b) wosba  (c) wosla  (d) wosle  

10. **You don't carry a horse.**  
    (a) wo shir lem  (b) wo shir bem  (c) wo shir bam  (d) wo shi bem  

11. **You don't see me.**  
    (a) sowlem  (b) wosle  (c) wosolem  (d) woslem  

12. **I didn't carry father.**  
    (a) so gader bem  (b) so gade bem  (c) so gader lem  (d) so gader lam  

13. **You saw a horse.**  
    (a) wo shir la  (b) wo shir be  (d) wo shir ba  

14. **I didn't see you.**  
    (a) woslem  (b) sowlam  (c) sowlem  (d) woslem  

15. **Father doesn't carry a horse.**  
    (a) gade shir bem  (b) shir gader bem  (c) gade shi bem  (d) gade shir lem
PIMSLEUR LANGUAGE APTITUDE BATTERY
ANSWER SHEET

Name______________  School______________  Teacher______________
Age______________  Grade______________

<table>
<thead>
<tr>
<th>MAJOR SUBJECTS</th>
<th>Grades 90-100 or A</th>
<th>80-89 or B</th>
<th>70-79 or C</th>
<th>60-69 or D</th>
<th>60 or fail</th>
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</table>

Do division here:

4 3 3 9 2 2 9 1 1 9 0 3
Average

INTEREST
We would like you to give an honest estimate of how interested you are in studying a modern foreign language. In making this estimate, ask yourself how useful it will be to you, how much fun you will get from it, and how interested you are in foreign languages as compared with other subjects.
Take time to think over your answer, then indicate your interest in studying a modern foreign language. Of course, we need an honest answer.
A = strongly interested
B = quite interested
C = mildly interested
D = more or less indifferent
E = rather uninterested

<table>
<thead>
<tr>
<th>VOCABULARY</th>
<th>Sample A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>12.</td>
<td>24.</td>
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</table>

LANGUAGE ANALYSIS

1. A B C D
2. A B C D
3. A B C D
4. A B C D
5. A B C D

SOUND DISCRIMINATION

1. cabin friend boa
2. boa friend friend
3. boa friend boa
4. boa friend friend
5. boa friend boa
6. boa friend friend
7. boa friend boa
8. boa friend friend
9. boa friend boa
10. boa friend boa
11. boa friend boa
12. boa friend boa
13. boa friend boa
14. boa friend boa
15. boa friend boa
16. boa friend boa
17. boa friend boa
18. boa friend boa
19. boa friend boa
20. boa friend boa
21. boa friend boa
22. boa friend boa
23. boa friend boa
24. boa friend boa
25. boa friend boa
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43. boa friend boa
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### SOUND - SIMBDL ASSOCIATION

**Note:** See sample below - LD

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**Sample:**
- trapeld
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- trapeld

**Misspellings:**
- trapeld
- trapeld
- trapeld
- trapeld
- trapeld
Bibliography


"Predicting Success in High School Foreign Language Courses," *Educational and Psychological Measurement*, XXIII, No. 2 (Summer, 1963), 349-357.


