PROJECT TALENT

THE IDENTIFICATION, DEVELOPMENT, AND
UTILIZATION OF HUMAN TALENTS

Studies of a Complete Age Group - Age 15

Cooperative Research Project No. 566

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FOREWORD

This report, which is the final report on Cooperative Research Project No. 566, carried out by the University of Pittsburgh under contract with the United States Office of Education, is the third in a series of technical reports dealing with Project Talent. The first two are:

1. Flanagan, Dailey, Shaycoft, Orr, Gorham, & Goldberg. Designing the study. Pittsburgh: 1960. (Technical report to U.S. Office of Education, Cooperative Research Project No. 635.)

and

2. Flanagan, Dailey, Shaycoft, Orr, & Goldberg. Studies of the American high school. Pittsburgh: 1962. (Final report to U.S. Office of Education, Cooperative Research Project No. 226.)

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Clinton A. Neyman, Jr. drafted part of Chapter V, prepared Appendix D,
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Stuart E. Sherman supervised the hand processing of the Student Infor-
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                            John C. Flanagan
                            Responsible Investigator

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Chapter I. INTRODUCTION

A. Purpose of the Research

As a part of the larger program of research on the identification,
development and utilization of human talents, a study was conducted
under Office of Education Cooperative Research Project No. 566, to lo-
cate and test a sample of all members of a specific age group whether
or not in school. The larger study, which is still in progress, has
been fully described elsewhere.* The special study which is the sub-
ject of the present report has several objectives:

1. To insure, by supplementing the data on high school students
    (collected under the main phase of the larger research program)
    with data on boys and girls of high school age but not in high
    school, that the national inventory of talents would be truly
    comprehensive.

2. To develop national norms based on a truly representative sam-
    ple of an age group--rather than just on those members of the
    age group who are in high school, and who therefore do not
    provide adequate representation of the seriously retarded.

3. To compare the following four groups of persons with regard to
    various important characteristics:

    a. School dropouts

    b. Students who are in school but below the normal grade for
        age

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study. Pittsburgh: 1960. (Technical report to U.S. Office of Education,
Cooperative Research Project No. 635.)

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high school. Pittsburgh: 1962. (Final report to U.S. Office of Educa-
tion, Cooperative Research Project No. 226.)

c. Students who are making normal progress through school

d. Accelerated students

Among the important variables in regard to which these four groups are to be compared are:

a. Aptitudes, abilities, and educational achievement levels

b. Background characteristics: family, home, activities

c. Interests, goals, and aspirations--with particular emphasis on factors related to choice of an occupation

4. To draw inferences concerning the factors that lead students to drop out of school.

5. To provide a substantial body of data concerning the aptitudes and abilities of a representative sample of members of a single age group, so that later on, when follow-up data become available, these data can be used to provide answers to questions such as the following:

a. How many dropouts have entered various trades and industrial occupations?

b. What are the aptitude and interest patterns of the dropouts who entered these trades and occupations?

c. What influence does the training acquired during the time in school (e.g., training in shop work) have upon later occupational activities?

d. How do dropouts compare in job progress and effectiveness on the job with persons completing their high school education who entered similar occupations?

e. What are the chances for improving current teaching methods, on the basis of inferring the effects of present methods, by comparing the success attained by high school graduates with the success attained by those who receive no education beyond the eighth or ninth grade?

B. Scope

The design of the research called for efforts to secure a sample that would be as representative of a complete age group as possible. This meant that the sample was to include not only high school students in Grades 9-12 (who were the subjects used in the larger program of

research of which the present study is a part) but also members of the selected age group who were in any of the following categories:

1. Still in school, but not in Grade 9, 10, 11, or 12

2. School dropouts

3. Not in school, because of serious illness or physical disability

4. Mentally retarded

5. In institutions

It was subsequently decided that the purposes of the project could be furthered by providing a substantial body of data concerning the aptitudes and abilities of 7th and 8th grade students. This would make it possible later on, when follow-up data become available, to supplement information concerning the out-of-school members of the selected age group with information on another sizable group of persons who could not be covered by the main Project Talent sample. This important supplementary group would consist of those 7th and 8th graders who are destined to drop out before reaching high school, and also a more representative group at these grade levels with whom the dropouts can be compared.

C. Choice of Age Group

On the basis of a preliminary survey of the situation, it was decided to use 15-year-olds as the complete age group. The decision that this would be the optimal group was dictated by both practical and theoretical considerations.

For practical reasons the selected age group had to meet two conditions. First, almost everyone in the age group would have to still be in school; and secondly, most of those in school would have to have reached high school. The first of these conditions was important because those still in school would be comparatively easy to locate and to arrange to test, while it was obvious that this state of affairs would not be generally applicable to those not registered in school. Some of these out-of-school youth might be very difficult or impossible to locate, and others, even if located might be difficult to persuade to subject themselves to testing. And the second condition, the requirement that most of those in school have reached high school, would make it feasible to use the regular Project Talent sample to provide a probability sample of members of the selected age group who were in Grades 9-12. This requirement that the vast majority of the population under consideration be in high school meant that the selected group had to be at least 15 years old, since a very sizable proportion of 14-year-olds are in Grade 8.

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By a convenient coincidence, the 15-year-olds turned out to be not only the youngest group that would be feasible but also the oldest, since it was the last age group for which, because of the compulsory school attendance laws, almost all of the youth of the nation would still be in school. (In most states it is legal to drop out of school at age 16 but not before.)

Those were the practical considerations that dictated choice of the 15-year-olds as the age group to be studied. As for the theoretical considerations, it must be borne in mind that one of the primary goals of Project Talent was to secure a national inventory of abilities. For this purpose the 15-year-olds seemed more suitable than a younger group would be, since the 15-year-olds would be more like an adult group, and therefore the data would provide a better basis for drawing inferences about the distribution of various kinds of abilities among adults.

For these reasons, then, the 15-year-old age group was chosen as the group on which to base the research described in this report. For this study, 15-year-olds were defined as boys and girls who had passed their 15th birthdays as of 1 March 1960 but had not yet reached their 16th birthdays.

Chapter II. PROCEDURE

        Since a study of a large-scale nationally representative sample of a
single age group had never been carried out before, procedures had to be
developed from the beginning. In order to avoid expensive duplication
of effort, data collection for the present study was coordinated with that
for the larger study. While this procedure had the minor disadvantage of
making the present study somewhat dependent upon certain phases of the
larger study, to have done it any other way would have doubled or tripled
the costs.

A. Sampling

        Having defined the population of interest, the next problem was to
select a sample for study. Since the sampling procedure was tied to that
for the main study, the latter will be summarized first.* But because
both the regular sample for the main study and the special sample for the
study of 15-year-olds are essentially "probability samples", it seems
advisable to precede the description of the procedures used with a brief
discussion of the nature of such samples.

1. The concept of "probability samples"

    By "probability sample" is meant a sample chosen in such a way that
    the following conditions are met:

    a. For every member of the population the a priori mathematical
        probability of inclusion in the sample must be known.

    b. For every member of the population this a priori probability
        must be greater than zero. In other words every member of the
        population must have some chance of being included in the
        sample.

    Note that in a probability sample the probability of selection does
    not have to be the same for all members of the population. The

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    *Full details about the sampling procedure are given in Chapter III
of Designing the study. (Flanagan. et al., op. cit.)

probabilities merely have to be <u>known</u> and <u>greater than zero</u>. In the data analysis stage, it is possible to correct for differential probabilities (i.e., differential sampling ratios) by appropriate differential weighting of the cases.

Use of a probability sampling procedure is the one best way of insuring that unbiased estimates of population values can be obtained.

2. <u>The regular Project Talent sample</u>

The regular Project Talent sample consists basically of all the students in Grades 9, 10, 11, and 12 in between four and five per cent of all secondary schools in the United States. The high schools selected were a stratified random sample of all senior high schools, and the associated junior high schools. The stratification variables were:

a. Broad category of school

For this purpose the schools were divided into three broad categories: public, parochial, and private.

b. Geographical area

For this purpose 56 strata were used, namely: the five cities with populations in excess of 1,500,000 (New York, Chicago, Los Angeles, Philadelphia, Detroit); the District of Columbia; and the 50 states (with the five large cities named above removed).

c. Size of senior class

This basis of stratification was used for public schools only. The following four strata were used: (1) under 25 seniors; (2) 25-99 seniors; (3) 100-399 seniors; and (4) 400 or more seniors.

d. Retention ratio

This value, which was defined as ratio of number of graduates* to number of tenth-graders**, was also used as a stratification variable for the public schools (but not for the private or parochial schools).

On the basis of technical considerations concerning sampling methodology, it was decided that the most efficient sample of a given size would be obtained by using differential sampling ratios for the different school size strata (undersampling the smallest public schools, oversampling the largest ones, and correcting the resultant data through

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*In 1958-1959 school year
**In 1957-1958 school year

the use of differential school weights). Accordingly the following
sampling ratios were used:

	Sampling ratio
Public schools with fewer than 25 seniors	1:50
Public schools with 25-399 seniors	1:20
Public schools with 400 or more seniors	1:13
Parochial schools	1:20
Private schools	1:20

Exceptions to this procedure occurred in New York City and Chicago,
where through special arrangements with the school authorities,
more schools participated but only a sample of the students in the
included schools were tested. In New York City every senior high
school and every junior high school participated; it was agreed to
test one out of 12 students in each school. In the case of Chicago's
38 academic and technical high schools, 20 of them were selected at
random and one-tenth of the students in every grade in every selected
school were tested.

Throughout the sampling process, in every instance where randomiza-
tion was required, it was achieved through the use of random numbers.
It might be mentioned in passing that for some of the sampling opera-
tions the random numbers were generated by an electronic computer
and for other operations they were found in a published table. The
distinction between the two sources of random numbers is of no real
importance, however. The important point is that no efforts were
spared to make the sampling process a genuinely random one.

The resultant sample consisted of 1063 senior high schools, together
with the associated junior high schools. Of the 1063 invited schools
987 agreed to participate. This amounted to an unusually large total
acceptance rate, 93 per cent. The breakdown of sampling units (senior
high schools) invited and accepting is shown in Table II-1.

In summary, then, a probability sampling procedure was used, with
senior high schools constituting the sampling unit, to select the
regular sample. This sample consists of 987 senior high schools that
agreed to participate, together with 238 associated junior high schools--
a total of 1225 schools. This regular sample comprises public, paro-
chial, and private schools. A total of nearly 400,000 students in
Grades 9-12 were tested in these schools. These 400,000 students
constitute the regular Project Talent sample.

3. Division of the regular sample into ten subsamples

For use in analyses where the total regular sample would not be re-
quired, the 987 high school sampling units were divided into ten

Table II-1

Number of Sampling Units that Participated or Declined
to Participate in Project Talent

	Number of senior high schools			
	Public	Parochial	Private	Total
Participating	822	114	51	987
Declined	57	11	8	76
Total	879	125	59	1063

subsamples which were as close to equivalent in terms of the strat-
ification variables as could reasonably be achieved. Junior high
schools were assigned to the same subsamples as the senior high
schools with which they were associated. In the case of junior
high schools (such as those in New York City) which were not directly
associated with any specific senior high school, the school was
assigned to a subsample on whatever other basis seemed reasonable,
in order to maintain the qualitative (and quantitative) equivalence
of the ten subsamples to as great a degree as feasible.

The resultant ten approximately equivalent subsamples into which the
1225 junior and senior high schools of the regular sample were divided
were designated "Subsamples 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9." As
will be seen, one of these ten subsamples ("Subsample 0") plays a
major role in the study of 15-year-olds.

The 76 schools which had been invited to participate in Project
Talent but had declined were likewise distributed among the ten
subsamples, for possible inclusion in special studies involving
school characteristics.

4. The special sample of 15-year-olds

For the special study of 15-year-olds with which this report deals,
it was necessary to obtain a special sample of 15-year-olds not in
Grades 9-12, to supplement the members of this age group who were in
our regular sample. This special sample was to consist of those 15-
year-olds not in high school who were residing in the school districts
corresponding to one-tenth of the "general-purpose public senior high
schools" in our regular sample. (The term "general-purpose high school"
will be explained a little later.)

For this purpose it was decided to use the school districts correspond-
ing to the general-purpose public senior high schools in "Subsample 0,"
which is one of the ten subsamples into which the regular sample had
been divided (as described in Paragraph 3 above).

The use of school districts corresponding to general-purpose public .
senior high schools was based on the assumption that for every bit of
habitable area in the United States there is a general-purpose public
high school to which residents can send their offspring, and that there-
fore by using as the sampling units the geographical areas to which these
schools correspond, a probability sample can be obtained.

In order to simplify determination of the a priori probabilities of
inclusion, it was considered desirable to divide the country into
geographical sampling units in such a way that each member of the
population (non-high-school 15-year-olds) would be included in only
one sampling unit. Hence the decision that only "general-purpose
public high schools" would be used. General-purpose public high schools
were defined operationally as the set of high schools meeting the require-
ment that together the districts defined as corresponding to them would
cover the United States completely and without overlap. This meant that
these schools would mostly fall in the category of comprehensive high
schools, and that non-public schools, vocational high schools, and other
special purpose public high schools (e.g., schools for the deaf) would
not be included. It also meant that some ad hoc redefinition of "school
districts" would be necessary for use in defining the special sample in
situations where more than one general purpose high school was available
to residents of an area. For instance, let us consider the situation in
a multi-school town where the high schools did not have specific area
boundaries. If there were N general-purpose high schools in such a
town and n elementary or junior high schools, and if one of the N high
schools were in Subsample 0, the area defined as corresponding to this
high school would be that corresponding to the $\frac{n}{N}$ elementary schools or
junior high schools closest to the "Subsample 0" high school.

A slightly different procedure was necessary in New York and Chicago,
where the regular sample had not been defined as including 100 per
cent of the students in the included schools.

In New York City the geographical areas for the special sample of
15-year-olds were defined as the school districts corresponding to
five junior high schools chosen randomly within boroughs (one junior
high school for each of the five boroughs of the city).

In Chicago two elementary schools were selected randomly to define
the school district for the special 15-year-old sample.

In those sections of the South where segregated schools still exist,
when the school for whites was in Subsample 0 only whites were included
in the corresponding group of 15-year-olds not in high school. Likewise

when the school for Negroes was in the subsample, only Negroes were included in the corresponding non-high-school group. This was done in order to maintain the "probability sample" feature, which was deemed very important from the point of view of subsequent statistical analysis of the data.

Of the 88 public senior high schools in Subsample 0, 84 had participated in Project Talent (the main study) and four had not. Three of the 84 participating schools were eliminated from the special study of 15-year-olds because they were vocational schools and one was eliminated because it was a special school drawing its students from the entire state, and thus did not define a school district. Elimination of the seven Subsample 0 general senior high schools from New York City and the two from Chicago left 75 school districts in addition to the five junior high school districts for New York City and the two elementary school districts for Chicago. Thus altogether there were 82 school districts comprising the geographic area for the special sample. Of these 82, 78 were for schools that had participated in the regular testing. Regional Coordinators were able to secure complete cooperation from 75 of the 78 schools. The other three, like the four that had <u>not</u> participated in the main study, found it administratively not feasible to cooperate in the study of 15-year-olds.

5. <u>The supplementary sample</u>

In addition to the regular sample of students (consisting of students in Grades 9-12 in the regular sample of schools) and the special sample of 15-year-olds, some other groups were also tested. These groups, which are excluded from all analyses of the "regular sample data" but are available for inclusion in special studies where appropriate, include, among others:

a. The entire 8th grade in certain schools whose Grade 9-12 students are in the regular sample.

b. A "saturation sample" of Knox County, Tennessee, including the city of Knoxville. This saturation sample consists of every student in every school (public, parochial, or private) in Knox County, in Grades 8-12. Two Knox County senior high schools had been chosen for inclusion in the regular sample. The supplementary sample includes, in addition to the Grade 8 students in these two sampling units, all the rest of the Grade 8-12 students in Knox County.

c. A few other schools, in which, by special arrangement, all students in Grades 9-12 were tested.

The first two of the three categories of supplementary sample cases described above are expected to provide valuable auxiliary data to

that obtained in future analyses of the special sample of 15-year-olds. The special value of the supplementary sample lies in the fact that it will provide data on a very sizable group of 8th graders, and thus will provide useful supplementary information on those students who drop out of school without ever entering high school.

Thus the 1225 secondary schools of the regular sample were importantly augmented by 123 supplementary sample schools. Five additional junior high schools, which lacked a 9th grade but contained many 15-year-olds below Grade 9 who were needed for the special sample, brought the total number of schools in Project Talent up to 1353, about 5 per cent of all secondary schools in the United States.

B. Data Collection for Special Sample

1. Locating the 15-year-olds belonging in the special sample

Regional Coordinators made intensive efforts to locate 15-year-olds not in high school (Grades 9-12) who lived in the 75 school districts. The first source of information consulted was the school system itself. In many communities accurate records were available at the school superintendent's office. The Regional Coordinators were thus able to utilize the records of these school systems to identify the 15-year-olds not in school as well as those in school below the 9th grade.

In most states there are rigidly enforced laws requiring students to attend school until the age of 16, so that there were extremely few 15-year-olds not in school and these few generally were institutionalized cases. Thus in most states, virtually all the 15-year-olds were locatable.

In other communities various agencies and persons were helpful in identifying and locating the 15-year-olds out of school. These included truant officers, visiting teachers, probation officers, police, sheriffs, and welfare agencies.

In some cases, after lists of possible 15-year-olds out of school were obtained, the last known address was visited to try to determine the status of the individual.

2. Testing the 15-year-olds in the special sample

Fifteen-year-olds who were in school but not in Grades 9-12 were tested in a number of ways, depending on what procedure fitted best in the local situation. Very often the 15-year-olds were brought to the high school and tested along with the other students. In some cases, this involved collecting students on a bus from several schools and taking them to the high school on the testing days. School systems cooperated fully in these round-ups. In other cases, it was administratively easier to test the entire 7th and 8th grades of an elementary or junior

high school, in order to have all the 15-year-olds included in the
group tested. Non-public schools cooperated in testing 15-year-olds
below the 9th grade, either by sending them to the public high school
or by testing them in the elementary schools.

In cases where 15-year-olds were not attending any school at all, the
Regional Coordinators made special arrangements to try to test them.
Very often this entailed testing them individually. In other cases,
it was possible to test several at one location. In one case, a
high school principal drove around a county, collected twenty-six
boys and girls, and brought them in from miles around, for testing.
They were paid a modest fee to take the tests or to be interviewed.
The school superintendent personally assisted in this operation.

The standard Project Talent battery was used for the special sample.
One additional instrument, called Supplement for the Student Infor-
mation Blank,* was used only for the 15-year-olds not in any school.

3. Adequacy of the data collection

There is reason to believe that in almost all cases the Regional
Coordinators were very thorough in their efforts to collect the
required data. (Some specific examples of their intensive efforts
are described in Paragraphs 1 and 2 above.)

However, there were a few areas where such great difficulties were
encountered that even strenuous efforts to locate 15-year-olds out
of school met with only limited success. For example, in one south-
eastern community where no compulsory school attendance law was in
effect, hardly any 15-year-olds out of school could be found. But
instances where something like that happened are only isolated inci-
dents, and therefore it seems reasonable to suppose that on the whole
the sample was fairly complete. Certainly there was some coverage of
most of the major groups known to contribute a sizable proportion of
the dropouts. Boys and girls of Mexican and Puerto Rican origin
(especially in Texas and New York City) and Negroes in the large
cities and the South were among the groups represented.

Unfortunately, however, though most 15-year-olds apparently were
located, it did not prove possible to test them all. A record form
was gathered for most, but test scores and other data were sometimes
impossible to get. Some 15-year-olds below the 9th grade but in
school apparently were not tested because of mix-ups or because it
proved impossible to make suitable arrangements. But many others

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*Shown in Appendix A.

were not tested for the simple reason that the Regional or Local
Coordinators found them incapable of taking the tests. Their read-
ing and writing skills were quite inadequate for the task.

Table II-2 shows a breakdown of the 82 sampling units which define
the school districts for the special sample of 15-year-olds. For
slightly more than half of the schools cooperating there are appar-
ently no 15-year-olds in the district who are not in school.

Table II-2

Tabulation of the Sampling Units (School Districts)
in the Special Sample

	No. of School Districts
A. Schools reporting no 15-year-olds out of school	
1. Reporting some 15-year-olds below Grade 9	30
2. Reporting no 15-year-olds below Grade 9	10
Subtotal	40
B. Schools reporting some 15-year-olds out of school	
1. Reporting some 15-year-olds below Grade 9	26
2. Reporting no 15-year-olds below Grade 9	9
Subtotal	35
C. Schools for which no data are available	7
Total	82

Table II-3 shows the number of 15-year-olds not in school and in school
below Grade 9, separately for schools reporting no 15-year-olds out of
school, and for schools reporting some. In each case the estimated
total number of 15-year-olds below Grade 9 is partially inflated since
schools sometimes reported students as 15-year-olds who were outside
this age range. On the other hand some cases, particularly 15-year-olds
below Grade 9 in the non-public schools, may not have been located.

Table II-3

Number of 15-Year-Olds in the Special Sample,
and Kinds of Data Obtained about Them

| | Number of 15-Year-Olds | | | | |
| | Below Grade 9 | | | Out of School | Total |
Kind of Data Obtained	In Type A* School Dist.	In Type B* School Dist.	Total	(Type B*)	
Complete test data	224	267	491	13	504
Partial but not complete test data	52	175	227	11	238
Partial or complete test data	276	442	718	24	742
SIB supplements	---	---	---	103	103
SIB supplements and/or partial or complete test data	276	442	718	106	824
No data	159**	275**	434**	147**	581**
TOTAL	435**	717**	1152**	253**	1405**

*School districts
 "Type A" means district for school reporting no 15-year-olds out of school
 "Type B" means district for school reporting some 15-year-olds out of school
**Estimated number, based mainly on Regional Coordinators' reports

It will be noted that the number of 15-year-olds below Grade 9 who were tested is somewhat smaller than the estimated population. This is due to the difficulties involved in actually locating these students, and getting them to report for the tests. Further reduction of the number of 15-year-olds below Grade 9 for whom complete information was obtained is due to the fact that some of the academically retarded boys and girls were unable to complete the tests and fill in the forms, or became discouraged in their attempts to do so.

The 15-year-olds out of school were even harder to locate, and the 103 Supplements for the Student Information Blank and the 22 partial or complete sets of test data probably were all that could be obtained. These boys and girls were even more reluctant in most cases to take tests and fill out forms (and less capable of doing so) than those in school below the 9th grade.

C. Differential Weighting of the Cases

As has already been indicated in the discussion of sampling procedures, differential weights correcting for differential sampling ratios were necessary in order to obtain unbiased estimates of means, standard deviations, and other values for the national population represented by the sample.

Four sets of weights (designated Weight A, Weight B, Weight C, and Weight D) have been developed for Project Talent, each suitable for a different purpose, but since only three of these sets (Weights A, B, and D) are applicable to the special study of 15-year-olds, only these three will be described here.

Weight A, when applied to a group of students in the regular sample, is intended to reproduce the national population represented by that group. Thus weighted means obtained by applying Weight A to all Grade 12 boys in the sample who plan to go to college should be unbiased estimates of the corresponding means for all such boys in the entire country.

Weight A is the same for all the students in a school. It equals the reciprocal of the sampling ratio, divided by the proportion of the invited schools in its category (on the basis of the stratification variables) that agreed to participate in Project Talent. Thus it corrects simultaneously for differential sampling ratio and for differential acceptance rate.

Weight D is intended for use solely in analysis of the data for the 15-year-olds. For each 15-year-old in high school, Weight D is identical to Weight A. For each 15-year-old in the special sample, except in New York City, Weight D is exactly ten times as large as Weight A for the corresponding high school cases. This multiplication by ten corrects for the fact that only one of the ten regular subsamples was used in determining the school districts for the non-high school cases. In the case of

four of the five junior high school districts used to define the special
sample in New York City, Weight D equals ten times the number of junior
high schools in the corresponding borough. (In the case of the fifth
borough, Richmond, an additional adjustment had to be made to correct
partially for the fact that this borough is not fully covered by junior
high school districts.) A similar adjustment was theoretically necessary
for the special sample cases in Chicago, but by coincidence the adjusted
value for Weight D turned out to equal ten times Weight A, so that no
special modification was needed for Chicago.

Weight B, unlike Weights A and D, is primarily applicable to the
schools themselves, rather than to the boys and girls in those schools
(or resident in the corresponding school districts). When the Weight B
values are applied to a group of schools in the regular sample (e.g.,
all the public high schools in cities with populations between 5000 and
250,000) the purpose is to get an estimate of statistics based on all
such schools, whether in the regular Talent sample or not.

Weight B, like Weight A, corrects simultaneously for differential
sampling ratio and for differential acceptance rate. Weight B is iden-
tical to Weight A except for the New York City and Chicago schools, in
which the sampling ratio differed for students and schools because of
the fact that there was sampling of the students within the schools.

D. Overview of the Kinds of Data Analysis

The remainder of this report deals with what was found out about the
15-year-olds as a group and what was found out about 15-year-olds at dif-
ferent levels of schooling--including those who have been accelerated,
those who have been making normal progress through school, those who are
a year or more behind in school, and those who have dropped out altogether.

Chapter III deals primarily with the 15-year-old who has dropped out
of school.

Chapter V deals with the total group of 15-year-olds at all levels
of schooling. Chapter IV, which is concerned with age-grade relation-
ships, and Appendix B of Chapter V, which presents correlational data,
deal with the high school student in general and are intended to provide
a background against which to view the data reported in Chapter V.

Both extensive correlational data and means and standard deviations
for a wide variety of variables are presented and discussed in Chapter V.
Percentile norms are also presented (in Appendix C) for over 50 test
variables.

Chapter III.   THE FIFTEEN-YEAR-OLD DROPOUT

Fifteen-year-olds not in school who could not be tested were asked
to supply the information called for by the Supplement for the Student
Information Blank (SIB Supplement)*.

Supplements were obtained for 103 of the 253 15-year-olds not in
school (49 boys and 54 girls). The forms were designed to be filled out
partly by the 15-year-old himself and partly by the Regional Coordinator
or other interviewer.

A.   Size of Group and Definition of Group

In addition to the 103 SIB Supplements received for dropouts, there
were SIB Supplements filled out for 23 of the 15-year-olds whose self-
reports indicated they were still in elementary school. While some of
these SIB Supplements, which were intended only for 15-year-olds not in
school, were probably filled out through a mix-up, others were probably
filled out as a result of a real ambiguity in the status of the 15-year-
old. In other words, there is reason to believe that some of these boys
and girls, having been long-term truants, are regarded by the school
authorities as dropouts but that they still consider themselves students
in the sixth or seventh or eighth grade of the local elementary school.
Evidence of this ambiguity lies in the conflict between the report of
the Local Coordinator, who certified some of these boys and girls to us
as not being in school, and their own reports on Record Form Z, in which
they indicated clearly that they were still in school, in one of the
elementary grades. (There is enough redundancy built into Record Form Z
that when it is filled out consistently throughout, it is reasonable to
infer that the statement that the youngster is still in school was made
intentionally, and not a mere clerical error.)

This phenomenon of the "gray area" between "dropouts" and over-age
students who are habitual truants seems to occur chiefly in certain
rural or semi-rural areas sizable segments of whose populations are dis-
advantaged groups. If efforts are made in these areas to enforce the

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*This form is shown in Appendix A, Part 1.

compulsory education laws, these efforts are apparently unsuccessful
in regard to the 15-year-olds who choose to absent themselves from
school permanently.

In a couple of schools there are apparently about a third as many
15-year-olds still at the elementary school level who are in this nebu-
lous "gray area" midway between truancy and formally recognized with-
drawal from school, as there are 15-year-olds who are actually attending
elementary school with some degree of regularity. Or, to put it another
way, there are certain rural regions where probably about one-fourth of
those 15-year-olds who according to law ought to be attending elementary
school are managing to by-pass the law.

Although there certainly would have been some justification for
treating these boys and girls as dropouts, since that is probably what
they are in almost every sense except that of legal sanction, we have
chosen, in the interests of consistency, to treat them in the data analy-
sis as 15-year-olds still in elementary school wherever there was reason-
able evidence that this was their legal status. This "reasonable evidence"
was considered to exist whenever Record Form Z was filled out in a way
that was not only consistent with the elementary school hypothesis but
also was internally consistent, and therefore presumably bore a degree
of dependability that an internally inconsistent document would lack.

There is still another aspect to the difficulty of determining mem-
bership in the "15-year-old dropout" group. It is necessary not only to
distinguish between 15-year-olds in school and those not in school, but
also to decide, in the presence of conflicting evidence, whether the boy
or girl is actually a 15-year-old. Some of those in the groups of drop-
outs rounded up for testing and believed by the Regional or Local Co-
ordinator to be 15 years old have reported their own ages to be 13 or 14
or 16 or 17 and have given as their dates of birth, dates compatible with
these self-reported ages. While clerical errors in reporting one's age
or date of birth can occur in any group and at any level of ability, the
frequency with which inconsistency between self-reports and the Coordin-
ator's report in regard to the age of the youth has occurred has been
too great among these disadvantaged groups with the truant-dropouts to
be attributable wholly to clerical error.

Part of the ambiguity is probably due to the fact that some of
the boys and girls concerned really don't know exactly how old they
are. They may be members of a sub-culture not attuned to the impor-
tance of accurate records in our contemporary civilization; and even
more relevant, many of them may be dependent for information about
their exact age on the vague and self-contradictory information that
may have been provided by a mentally retarded mother who has a large
number of children and a poor memory. This is not an unreasonable
supposition, since the majority of the boys and girls we are talking
about are academically retarded and many of them, as will be seen
later, are functionally illiterate and presumably of only borderline-
normal intelligence at best.

Thus we fully recognize that the student's self-report of his age may be wrong. Likewise the school's information about his age could also be wrong. Therefore we had to make an arbitrary decision as to what reported age we should accept in the case of contradictory reports. We settled on the policy of accepting self-reports when the reported age and date of birth were compatible, even though this policy eliminated from the study some of the boys and girls reported by the school authorities (via the Coordinator) to belong in the special group of 15-year-olds.

So much for the factors that cut our group of "15-year-old dropouts" for whom SIB Supplements were available down to 103. Now let us turn to a consideration of what the 15-year-old dropouts in our study are like.

B. <u>Age and Grade at Time of Withdrawal from School</u>

Most of the boys and girls who are not in school at age 15 dropped out when they were about 14 or 15 years old; very few of them dropped out before age 13. This is shown in Table III-1. And as shown

Table III-1. Distribution of Age at Time of Withdrawal from School (Based on 15-year-old Dropouts for whom SIB Supplements Were Filled Out)

Age	Boys	Girls	Total
15	17	14	31
14	12	13	25
13	2	8	10
12	1	3	4
11	-	1	1
10	1	2	3
9	-	1	1
Never entered	5	4	9
Subtotal	38	46	84
No information	11	8	19
Total	49	54	103

in the bottom row of Table III-2, no more than half of them got beyond Grade 6. In the case of most of the boys and girls who drop out before reaching 16, the factor determining the exact point at which they drop out appears to be age, not grade. Presumably in most

Table III-2. Grade Placement with Respect to Age, at Time of Withdrawal from School

Distribution Based on Fifteen-Year-Old Dropouts,
Divided According to Sex and Last Grade Completed

Status at time of dropout*	Sex	No info.	Never entered	Ungraded	1	2	3	4	5	6	7	8	9	10	Total
3 years ahead	M												-		-
	F												1		1
	Total												1		1
2 years ahead	M													1	1
	F													-	-
	Total													1	1
1 year ahead	M									-		-	-	-	-
	F									2		1	3	2	8
	Total									2		1	3	2	8
At grade for age	M								-	1	1	5	4		11
	F								1	1	2	5	2		11
	Total								1	2	3	10	6		22
1 year behind	M					-	1		-	2	1	-			4
	F					1	-			2	1	4	1		9
	Total					1	1			2	3	5	1		13
2 years behind	M							-	2	4	1				7
	F							1	-	-	1				2
	Total							1	2	4	2				9
3 years behind	M							1	-	1					2
	F							2	1	1					4
	Total							3	1	2					6
4 years behind	M						-	1							1
	F						2	-							2
	Total						2	1							3
5 years behind	M						1	1							2
	F						1	3							4
	Total						2	4							6
No information	M	12	5	1						1		1	1		21
	F	7	4	-						1		-	1		13
	Total	19	9	1						2		1	2		34
Total	M	12	5	1	-	-	2	3	3	6	4	7	5	1	49
	F	7	4	-	-	1	3	7	2	6	4	10	8	2	54
	Total	19	9	1	-	1	5	10	5	12	8	17	13	3	103

* Grade placement with respect to age; estimated on basis of last grade completed, date of dropout, and date of birth. Estimates were based on the assumption that a child would be eligible to enter Grade 1 if his sixth birthday came before November of the year of entering. This assumption is of course not universally valid in all jurisdictions, but it is probably close enough to the facts that if the exact status at time of dropout were known for each student, a few cases might be shifted up or down one year in this table, but the general picture presented by the table would be essentially unchanged.

of these cases neither the boys and girls themselves nor their parents regard it as important to stay in school until some specified level of academic attainment (e.g., Grade 6) is reached. But the compulsory education laws do tend to keep boys and girls in school at least until they are physically mature enough to have hopes of passing for 16-year-olds.

Since age at time of dropout is much less variable than grade at time of dropout, there is a substantial negative correlation between last grade completed and amount of academic retardation. In other words the lower the grade, the greater the amount of retardation. This is shown clearly by the bivariate distribution presented in Table III-2.

C. Factors Resulting in Withdrawal from School

In his write-in comments the interviewer in many cases provided interesting insights into the nature of factors which may have loomed large in the withdrawal from school. Some of these factors are discussed below.

1. Marriage and/or Motherhood

Nine of the 54 girls for whom SIB Supplements were provided reported they were married. Not surprisingly, none of the 15-year-old boys indicated marriage. Fourteen girls, most of them not married, reported that they had children.

2. Mental Retardation

Six of the boys and three of the girls were reported to be mentally retarded. While a few of the others may also be mentally retarded although not explicitly reported to be, it appears that "mental retardation" accounts for only a small proportion of the school dropouts.

3. Poor Scholastic Ability

Poor scholastic ability, unlike actual mental retardation, apparently is a significant factor in a very substantial proportion of the withdrawals from school.

Table III-2 gives direct evidence on this point, since it shows that well over half of those for whom information on this point was available were below the normal grade for their age, and that over a third were at least two years behind.

As Table II-3 shows, for most of the out-of-school group it proved impossible to obtain test data. There is reason to believe that in most instances this was because these boys and girls just could not read and write well enough to cope with the test-taking task--even though the pencil-handling requirements were minimal for all of the tests, and the reading requirements were minimal for some of them.

Some indication of the extent of "functional illiteracy" in
this group is obtained by inspecting the Reading Comprehension
scores for the 24 dropouts who took the test. The distribution
of these scores is shown in Table III-3.

Table III-3. Distribution* of TALENT Reading Comprehension
Raw Scores (R-250) and Grade 9 Percentiles
for 15-year-olds Not in School

Raw Score (R-250)	Grade 9 Percentile **	Number of Cases
31	68	1
19	33	1
12	12	3
11	10	3
10	8	3
9	6	2
8	4	1
7	3	4
6	2	2
5	1	1
4	1	2
3	1	1
N		24
Median	9.0	6.0
Mean	9.6	

* Based on all 15-year-olds not in school who took the TALENT Reading Comprehension Test.

** Tentative national norms, from "Project TALENT Counselors' Technical Manual for Interpreting Test Scores", Washington, 1960.

The median score, 9.0, is only the 6th percentile for ninth-
grade students. All but two of the group got scores no higher
than 12, which corresponds to a ninth-grade percentile of 12.
And even this very poor showing on the test might not fully indi-
cate the extent of functional illiteracy among those who drop out
of school at 15 or younger, since the 24 for whom scores are avail-
able are probably not entirely representative of the total group
of 15-year-olds not in school. It seems wholly improbable that
these 24 boys and girls who consented to take the full battery are

more likely that any bias would be in the other direction (i.e., in the direction that those tested are better readers than those not tested).

4. Emotional Disturbances

None of the boys was explicitly reported to be emotionally disturbed and only three of the girls were. Except for these three, no clear information was available on this point.

5. Health Problems

About two-thirds of the students for whom responses were available on the relevant SIB Supplement questions reported that they had no serious health problems. Major health problems or serious physical handicaps were reported for about 23 of the group. Presumably most of the remaining 29, for whom no response is available, are in good health. The data are summarized in Table III-4.

Table III-4. Health of 15-Year-Olds Not In School*			
	Boys	Girls	Total
Tuberculosis	--	1	1
Hospitalized (other)	--	4	4
Poor health (other)	1	3	4
Crippled	--	2	2
Otherwise disabled	7	5	12
Good health and no physical disabilities	26	25	51
Subtotal	34	40	74
No response or ambiguous response	15	14	29
Total	49	54	103

* The source of these data is the SIB Supplement.

Table III-5 shows what reasons were given by the boys and girls themselves for having left school. (These reasons were given in response to Question 2 of the SIB Supplement.) In this table, the reasons are also distributed jointly with last grade completed.

Only about three per cent of the dropouts indicated that low grades or scholastic difficulties were at the root of their withdrawal from school; however it was undoubtedly a big factor, since about

Table III-5. Distributions of Reasons Given for Leaving School*; by Sex and by Last Grade Completed (Based on 15-Year-Olds Not in School for Whom SIB Supplements Were Filled Out)

Reason for Leaving School*	Boys	Girls	Total	Last Grade Completed											
				No Info.	Never Entered	Un-Graded	2	3	4	5	6	7	8	9	10
1. Illness or physical handicap															
a. Illness	2	5	7	1	1	-	-	-	-	-	-	-	2	3	-
b. Physical handicap	-	3	3	-	1	-	1	1	-	-	-	-	-	-	-
2. To help out at home															
a. Help with housework	-	3	3	-	-	-	-	1	1	-	-	1	-	-	-
b. Take care of children	-	2	2	-	-	-	-	1	1	-	-	-	-	-	-
c. Take care of invalid	-	2	2	-	-	-	-	-	-	-	2	-	-	-	-
3. No money	1	-	1	-	-	-	-	-	-	-	-	-	1	-	-
4. To work	9	9	18	4	-	-	-	2	7	-	3	-	1	1	-
5. Marriage and/or pregnancy															
a. Marriage	-	6	6	1	-	-	-	-	-	-	1	1	1	2	-
b. Pregnancy	-	8	8	1	-	-	-	-	-	-	1	2	2	1	1
c. Marriage and pregnancy	-	3	3	-	-	-	-	-	-	-	-	1	2	-	-
6. Disliked school or school staff															
a. Couldn't get along with tchr. or prin.	2	1	3	1	-	-	-	-	-	1	-	-	-	1	-
b. Didn't like school	5	3	8	-	-	-	-	-	-	2	3	-	1	1	1
7. Couldn't do the work; low grades	3	-	3	-	-	-	-	-	1	-	-	-	-	2	-
8. Was expelled	7	-	7	2	-	-	-	-	-	-	1	-	2	1	1
9. Committed to reform school or training school	6	2	8	4	-	-	-	-	-	-	-	1	2	-	1
10. Mental hospital	-	2	2	-	-	-	-	-	-	-	-	-	1	1	-
11. "No reason"	1	-	1	-	-	-	-	-	-	-	-	-	-	1	-
12. Other	1	-	1	-	-	-	-	-	-	-	1	-	-	-	-
13. No answer given															
a. Interviewer says mentally retarded	6	2	8	1	7	-	-	-	-	-	-	-	-	-	-
b. Interviewer says functionally illiterate	1	-	1	-	-	-	-	-	-	-	-	1	-	-	-
c. No information available	5	3	8	4	-	1	-	-	-	2	-	1	-	-	-
TOTAL	49	54	103	19	9	1	1	5	10	5	12	8	17	13	3

*Based on response to SIB Supplement Item #2.

60 per cent of them reported in response to Question 2 of the SIB Supplement that their school grades had been very low.

Desire to get a job was given as a reason by many. For how many of these boys and girls a job was really a matter of desperate necessity rather than just an excuse for getting away from a hated school is problematical. There were at least one or two cases, however, in which desperate financial straits did seem to be the deciding factor; for instance a boy who withdrew because he couldn't pay the "book fee", and hoped to return. There were also several who withdrew under parental pressure to help support the family or to stay at home and take care of an invalid grandparent. Statements to this effect, written legibly and with grammatically correct wording, together with an expressed interest in returning to school, suggest that there are at least a few boys and girls of high school age who badly want an education and would be capable of profiting from it, but are deprived of it by conditions beyond their control.

D. The 15-Year-Old Out of School

Once the student has left school, what is his life like? Does he manage to get a job? Does he have any regrets? Does he ever consider returning to school? The S1B Supplement throws some light on these questions. For most of the boys and girls who indicated that their reason for dropping out of school was that they wanted to get a job and earn money, efforts in this direction appear to have been doomed to failure. Only seven of the 18 who explicitly stated that they had dropped out of school in order to get a job indicated they had been working regularly since then.

But few of them seemed to have much genuine interest in going back to school. About 30 per cent of them said they had thought about returning to school, but some of their replies to the question "Under what conditions would you return?" suggested that they were not very eager to do so. Some of these replies boiled down to an expressed willingness to return only if major changes were made in the school or its staff.

Joint distributions of responses to S1B Supplement Item 2 ("Why did you leave school?"), Item 5 ("Have you been working regularly since you left school?") and Item 3 ("Have you thought about returning to school?") are presented in Table III-6, separately for boys and girls.

Table III-7 summarizes the relationship between working regularly and interest in returning to school. This table is based on boys only, since the picture for girls is complicated by the fact that so many of them withdrew for reasons which would keep them out of the labor market (e.g., to help out in their own homes). While the data of Table III-7

Table III-6 Joint Distribution of Responses to 3 SIB Supplement Items (#2, #3, #6), by Sex
(Based on 15-Year-Olds Not in School for Whom SIB Supplements Were Filled Out)

#2 Reason for Leaving ↓ — #5. Working Regularly? → — #3. Thought About Returning? →

Columns within each sex group: **Working Regularly Yes** (Thought about returning: Yes / No / Tot.), **Working Regularly No** (Yes / No / No Ans. / Tot.), **Working No Ans.** (No Ans.), **Total** (Yes / No / No Ans. / Tot.)

Reason for Leaving	B·WY Yes	B·WY No	B·WY Tot	B·WN Yes	B·WN No	B·WN NoAns	B·WN Tot	B·NoAns	B·T Yes	B·T No	B·T NoAns	B·T Tot	G·WY Yes	G·WY No	G·WY Tot	G·WN Yes	G·WN No	G·WN NoAns	G·WN Tot	G·NoAns	G·T Yes	G·T No	G·T NoAns	G·T Tot
1. Illness or Physical handicap																								
a. Illness	-	-	-	1	1	-	2	-	1	1	-	2	-	-	-	2	2	-	4	1	2	2	1	5
b. Physical handicap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2	1	1	1	1	3
2. To help out at home																								
a. Help with housework	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	3	-	1	2	-	3
b. Take care of children	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	1	-	1	1	-	2
c. Take care of invalid	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	-	1	-	-	2	-	2
3. No Money	-	-	-	1	-	-	1	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
4. To work	2	2	4	1	4	-	5	-	3	6	-	9	1	2	3	2	4	-	6	-	3	6	-	9
5. Marriage and/or pregnancy																								
a. Marriage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	-	5	1	1	4	1	6
b. Pregnancy	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	1	4	-	5	1	2	5	1	8
c. Marriage and pregnancy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	3	-	1	2	-	3
6. Disliked school or school staff																								
a. Couldn't get along with teacher or principal	-	-	-	2	-	-	2	-	2	-	-	2	-	-	-	-	1	-	1	-	-	1	-	1
b. Didn't like school	-	2	2	1	2	-	3	-	1	4	-	5	-	-	-	1	2	-	3	-	1	2	-	3
7. Couldn't do the work; low grades	-	1	1	-	2	-	2	-	-	3	-	3	-	-	-	-	-	-	-	-	-	-	-	-
8. Was expelled	-	2	2	4	1	-	5	-	4	3	-	7	-	-	-	-	-	-	-	-	-	-	-	-
9. Committed to reform school or training school	-	-	-	2	1	3	6	-	2	1	3	6	-	-	-	1	1	-	2	-	1	1	-	2
10. Mental hospital	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2	-	1	1	-	2
11. "No reason"	-	-	-	-	1	-	1	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-
12. Other	-	-	-	-	1	-	1	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-
13. No answer given																								
a. Interviewer says mentally retarded	-	-	-	-	5	-	5	1	-	5	1	6	-	-	-	1	-	1	2	-	1	-	1	2
b. Interviewer says functionally illiterate	-	-	-	-	-	-	-	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
c. No information available	-	-	-	-	-	-	-	5	-	-	5	5	-	-	-	-	-	-	-	3	-	-	3	3
TOTAL	2	7	9	12	18	3	33	7	14	25	10	49	2	5	7	14	25	1	40	7	16	30	8	54

Table III-7. Joint Distribution of Responses to S1B Supplement
Items 5 ("Have You Been Working Regularly...?")
and 3 ("Have You Thought About Returning...?")

Based on 15-year-old boys not in school.

#3. Thought About Returning?	#5. Working Regularly?			Total
	Yes	No	No answer	
Yes	2	12	-	14
No	7	18	-	25
No answer	-	3	7	10
Total	9	33	7	49

are based on too few cases to be significant, they do serve as sign-
posts suggesting that among a substantial proportion of the dropouts
there is at least an element of regret at having withdrawn from school.

E. Environmental Factors

It seemed likely that localities characterized by a relatively
large number of 15-year-olds not in school would be different in
important respects from other localities. As a preliminary check on
the degree to which this was true, the dropouts were classified according
to characteristics of their neighborhoods. Considerable information on
the characteristics of the neighborhood served by each school partici-
pating in Project Talent is provided by the General School Character-
istics Questionnaire. A taxonomy system* for classifying public second-
ary schools into 17 groups which was developed in another phase of
Project Talent is based in part on these characteristics, and this
taxonomy can be used to throw some light on the nature of the neighbor-
hoods in which the school dropouts live. The 17 taxonomy groups are
described in Appendix A, Part 2. Four tables in Appendix E (Tables E-1,
E-2, E-3, E-4) show the distribution of certain salient characteristics
(kind of housing, character of neighborhood, percentage of "minority
group" students, and teachers' starting salary) estimated for the total
group of public secondary schools in the United States (divided into
four categories of schools representing the combination of the 17 public
secondary school taxonomy categories into four larger groupings).
Inspection of these four tables will give some idea of the character
of these groups of taxonomy categories. For fuller information about
them, the reader is referred to the second technical report (Flanagan,
et al., op.cit.). Table III-8 shows the distribution, according to
taxonomy group, of the schools that the dropouts would be attending.

*Described in Studies of the American High School (Flanagan, et al., op. cit.
Chapter 4).

Table III-8

Composition (by School Taxonomy Group) of "Special Sample"
of Non-High-School 15-Year-Olds

	Public Secondary School Taxonomy Groups ##					Total Reg. Sample S.H.S.	A	B	C	D		
							Counts for "Special Sample"					
Code	Kind of H.S.	Region	Kind of Community	Pop. of Community	Economic Level		School Districts	Grade 10 Students#	15-Yr-Olds Below Grade 9	15-Yr-Olds Not In School	C/B	D/B
10	Voc. or Trade	***	***	***	***	35	**	--	--	--		
21	Other	***	Lgst.City	1,500,000 up	Low	27	2	977	95	51	.097	.052
22	"	***	"	"	Mod-High	55	5	1953*	83	25	.042-	.013-
31	"	***	Lg. City	250,000-1,499,999	Low	5	1	190	16	5	.084	.026
32	"	***	"	"	Mod-High	21	3	631	46	13	.073	.021
41	"	N. E.	Urban	5,000-249,999	Low	4	0	0	0	0	--	--
42	"	"	"	"	Mod-High	47	4	803	50	4	.062	.005
43	"	"	Small Town	***	***	31	3	216	105	9	.486	.042
44	"	"	Rural	***	***	22	3	300	59	0	.197	.000
51	"	S. E.	Urban	5,000-249,999	Low	24	3	219	59	25	.269	.114
52	"	"	"	"	Mod-High	45	1	81	30	0	.370	.000
53	"	"	Small Town	***	***	42	4	401	46	9	.115	.022
54	"	"	Rural	***	***	101	11	796	193	37	.242	.046
61	"	Other	Urban	5,000-249,999	Low	11	3	652	35	2	.054	.003
62	"	"	"	"	Mod-High	83	7	1922	216	55	.112	.029
63	"	"	Small Town	***	***	138	13	961	104	9	.108	.009
64	"	"	Rural	***	***	131	12	539	15	9	.028	.017
Total						822	75	10641	1152	253	.108	.024

*One of the 5 schools is not included, since it had no students above Grade 8.
**Excluded from "Special Sample" school districts by definition.
***Not a factor in classification, for this taxonomy group.
#Grade 9 students were counted in schools that lacked Grade 10.
##A more detailed description of the 17 taxonomy groups is given in Appendix A, Part 2.

Also shown in this table, for purposes of comparison, are the total number of Grade 10 students (of all ages) in each taxonomy group in the schools of the "special sample", the number of 15-year-olds below Grade 9 in the same districts, and the number of special-sample schools in each taxonomy group. Table III-8 reveals considerable scatter of the dropouts in terms of school taxonomy group. The rural south (Taxonomy Group 54) and poor neighborhoods in southern cities (Taxonomy Group 51) and in the very large northern cities (Taxonomy Group 21) account for more than their share. Small towns in the Northeast also seem to have a bit more than their share of dropouts. This is shown by the column labeled "D/B", which presents the ratio of 15-year-old dropouts to number of Grade 10 students of all ages. (Grade 10 was chosen for this purpose because it is the normal grade for 15-year-olds.)

The C/B column shows the ratio of 15-year-olds below Grade 9 to Grade 10 students. Comparison of this column with the D/B column shows some noticeable disparities. Taxonomy Group 52, for instance, accounts for far more than its share of 15-year-olds below Grade 9 and fewer 15-year-old dropouts. Differences among schools (and among categories of schools) in regard to promotion policy and local differences in compulsory education regulations probably account for many of the disparities. There is only a slight positive correlation, not significantly different from 0, between prevalence of dropouts among the 15-year-olds and prevalence of 15-year-olds below Grade 9. (The Spearman rank-order correlation between D/B and C/B, for 15 "cases", i.e., 15 taxonomy groups, is .28.)

More light is thrown on the 15-year-old dropout by inspecting the characteristics of the four schools that account for over half of the dropouts. These four schools, in descending order of proportion of dropouts, are:

1. A southwestern school (Taxonomy Group 62). About 55 per cent of its students are Latin-American, and about 5 per cent are Negro.

2. A segregated school for Negroes in a southern city (Taxonomy Group 51).

3. A segregated school for Negroes in a rural area in the South (Taxonomy Group 54).

4. A New York City school (Taxonomy Group 21); about 55 per cent Latin-American, 15 per cent Negro.

These four schools apparently serve disadvantaged groups in large part. And adding just three additional schools brings the percentage of 15-year-old dropouts accounted for up to about 70 per cent. And these three other schools, too, serve substantial proportions of disadvantaged groups, including in the case of one school in the West, quite a few Indians.

F. Summary and Conclusions

As has been indicated, most of the 15-year-old dropouts who indicated they left school for economic reasons were unable to get regular jobs. This is hardly surprising, of course, to anyone who views the situation realistically. There are very few jobs open to the 15-year-old dropout--and most of these boys and girls have three strikes against them in the competition for what few jobs there are. First, the typical 15-year-old dropout lacks specific training and job skills. Secondly he lacks the basic tools of functional literacy--namely adequate reading and writing skills. And thirdly the child labor laws and other legal restrictions place sharp limitations on the kinds of work he may do.

It must be borne in mind that the group of dropouts we are talking about now are not the boys and girls who leave high school at the age of 17 or 18, after getting as far as, perhaps, the eleventh or twelfth grade. A substantial proportion of this older group of dropouts presumably consists of boys and girls who are fully capable of graduating from high school, and whose failure to do so is due primarily to deficient motivation rather than to deficiencies in ability. The withdrawal of these boys and girls from high school before graduation is undoubtedly a loss not only to themselves but to society. But as far as the 15-year-old dropouts are concerned, our evidence strongly suggests that very few of them, at present, have adequate reading and writing skills to enable them to master high school work and meet any reasonable standards for high school graduation. Thus, under present circumstances, most of these boys and girls probably would not have graduated even if they had stayed in school until they were 18.

While there is probably no pat solution to their problems, and to the problem they create for society, concentration of efforts on bringing boys and girls with reading deficiencies up to minimum standards of literacy might be the most constructive single step that could be taken in making it possible for them to profit from their schooling and to acquire marketable skills. And any success that might be achieved in raising their basic literacy level would also probably cut the number of dropouts by making them more interested in staying in school a while longer--perhaps even until graduation.

There are two hopeful aspects to the problem of the 15-year-old dropout. The first of these is that the magnitude of the problem is not great; only a very small percentage of the 15-year-olds are not in school. And the second hopeful aspect lies in the fact that the problem is apparently a relatively localized one--largely concentrated in a few areas. This localization is fortunate because it makes it possible to concentrate remedial efforts rather than scattering and diluting them. And although this may seem like a somewhat paradoxical statement, the fact that the problem occurs primarily among underprivileged or disadvantaged groups is also a hopeful sign, because it increases the possibility that remedial efforts will succeed. For instance it appears that a substantial segment of the 15-year-old dropout group consists of Puerto Ricans--many of them probably fairly recent arrivals in the United States

proper and therefore severely handicapped in terms of English-language literacy. This handicap is not a genetically transmitted disability, and it can be greatly reduced by training.

All things considered, the compulsory education laws in most states appear to be fairly effective in keeping boys and girls from dropping out of school before they reach 16--but there are apparently scattered trouble spots, here and there, where sizable groups are not receiving their quota of free education. Steps can be taken to improve this situation.

Chapter IV. ANALYSIS OF AGE-GRADE RELATIONSHIPS

A. Introduction

To provide proper perspective for the interpretation of the data
for 15-year-olds it is necessary to know how the 15-year-olds as a
group fit into the total pattern. It is not enough to know merely
what grades these students are in and what kinds of test scores they
get, both as an overall group and in terms of the subgroups into which
they may be split on the basis of grade and sex. These sorts of data,
which are presented in Chapter V, tell us a great deal about the 15-
year-old. But what they do not tell us clearly is how the 15-year-old
compares with the 16-year-old, the 17-year-old, the 14-year-old, and
the rest of his schoolmates--not merely in regard to grade distribution
but also in regard to abilities and achievement, as measured by per-
formance on the tests of the TALENT battery.

It is the purpose of this chapter, therefore, to provide the re-
quired background of age-grade patterns and age-grade-score patterns,
for high school boys and girls, as a setting against which the data
for 15-year-olds presented in the following chapter can best be inter-
preted.

B. Definition of Group on Which Data are Based

All of the data presented in the present chapter (except Table
IV-5) are based on a ten per cent subsample of the Project TALENT
schools--more specifically, on that particular ten per cent subsample,
designated Subsample 0, which was also used to define the school dis-
tricts in which 15-year-olds not in high school were to be located and
tested. (The present chapter, however, is concerned only with the
Grade 9-12 population, not with the special sample of 15-year-olds not
in high school.)

An additional restriction, a very minor one, is that the data in
this chapter are limited to the age range 12 to "20+", where "20+"
means ages 20 and 21 combined. This combining was done to simplify
computer processing. The two groups are so small that they have

little weight in any event, and it was therefore felt that combining them would not cause any major problems. Also in the interests of simplicity, a tiny handful of cases below age 12 (there were no more than three or four such cases at most) were eliminated, as were the very few cases over 21 years of age. In defining the age limits of the group (12 to 21) age was considered to mean "age at last birthday" as of the time of testing.

All the data analyses presented in this chapter are based only on those students for whom complete data are available. There is no reason to believe that these students are atypical in any important respect of the total group.

The total group on which the data of the present chapter are based, then, consists of 26,503 students.

C. Age-Grade Patterns

Table IV-1 shows how the 26,503 cases of our subsample are distributed, in terms of age, grade, and sex. In this table, the 2-year modal age interval is represented by the year immediately above the diagonal zigzag line and the year immediately below. Below the modal cases towards the bottom of the chart are the students who are above the normal grade for their age. These include both the students who have been accelerated and the students who are ahead of their age group because they entered the first grade a little younger than is customary. Likewise, above the modal group towards the top of the chart (Table IV-1) are the students who are below the normal grade for their age. These include students who have failed a grade or more sometime in their schooling, and perhaps also a few boys and girls who entered school a year or two late or lost time because of illness.

The numbers of students shown in Table IV-1 are raw frequencies, which have not been weighted to correct for differential sampling ratios. The corresponding weighted frequencies, which are approximately proportional to the numbers of students in these subgroups in the United States as a whole, are shown in Table IV-2. The dropout rate is highest, of course, for the group that is markedly below grade-for-age, but there is apparently a holding of the line against dropout, in the case of students who are very much over-age for their grade but nevertheless stay in high school considerably beyond the age when it would be easy for them to drop out. This is particularly true in the case of students who have reached at least the eleventh grade, so that graduation seems almost within grasp.

But in making comparisons of this sort it is necessary to take account of differential birth rates in different years. For instance, when we tested in 1960 there were about 15 per cent more 17-year-olds than 18-year-olds in the United States. This difference was, of course, reflected in the ratio of 17-year-olds to 18-year-olds in Grade 12, where these two age groups encompass the modal age. For this reason the total U. S. population in different age categories is shown in the last column of Table IV-2.

The purpose of Table IV-3 is to make direct comparisons simpler. For this table, numbers of cases have been corrected to approximate

Table IV-1. No. of Students in Project TALENT Sample, Distributed by Grade, Age and Sex
(Ages 12 to 20+; Grades 9-12; Cases with Complete Data; Subsample 0)

Age*	Sex	Grade 9	Grade 10	Grade 11	Grade 12	Total
20-21	M	2	2	13	24	41
	F	--	1	1	9	11
	Total	2	3	14	33	52
19	M	2	6	32	136	176
	F	1	2	12	68	83
	Total	3	8	44	204	259
18	M	6	46	180	868	1100
	F	6	22	100	692	820
	Total	12	68	280	1560	1920
17	M	79	290	1228	1688	3285
	F	36	150	971	1923	3080
	Total	115	440	2199	3611	6365
16	M	356	1294	1815	88	3553
	F	177	1038	2161	116	3492
	Total	533	2332	3976	204	7045
15	M	1323	1810	73	2	3208
	F	1141	2118	111	5	3375
	Total	2464	3928	184	7	6583
14	M	1719	91	1	--	1811
	F	2110	113	1	1	2225
	Total	3829	204	2	1	4036
13	M	96	1	--	--	97
	F	131	3	--	1	135
	Total	227	4	--	1	232
12	M	7	--	--	1	8
	F	3	--	--	--	3
	Total	10	--	--	1	11
Total	M	3590	3540	3342	2807	13279
	F	3605	3447	3357	2815	13224
	Total	7195	6987	6699	5622	26503

Note: The zigzag line represents the progression of modal age groups
from grade to grade.

* Age at last birthday at time of testing (Spring 1960).

Table IV-2. Numbers of students, by age, grade, and sex, proportional to corresponding numbers in total U.S. high school population.*

Age**	Sex	N Grade 9	Grade 10	Grade 11	Grade 12	Total	U.S.pop.*** in 1000's
20-21	M	413	432	2629	5328	8802	2149
	F	0	500	221	2205	2926	2244
	Total	413	932	2850	7533	11728	4393
19	M	433	1259	6764	28415	36871	1108
	F	211	721	2408	14048	17388	1168
	Total	644	1980	9172	42463	54259	2276
18	M	1516	9642	39873	178064	229095	1249
	F	1539	5204	20893	138607	166243	1249
	Total	3055	14846	60766	316671	395338	2498
17	M	17448	61238	259461	351171	689318	1457
	F	8576	32653	202899	388105	632233	1415
	Total	26024	93891	462360	739276	1321551	2872
16	M	75505	270118	382577	17433	745633	1450
	F	38211	212826	447055	22331	720423	1389
	Total	113716	482944	829632	39764	1466056	2839
15	M	275160	379807	13555	320	668842	1435
	F	231308	445461	21473	844	699086	1367
	Total	506468	825268	35028	1164	1367928	2802
14	M	360810	17349	120	--	378279	1403
	F	442366	21696	120	186	464368	1345
	Total	803176	39045	240	186	842647	2748
13	M	18142	120	--	--	18262	1789
	F	25113	360	--	200	25673	1726
	Total	43255	480	--	200	43935	3515
12	M	1034	--	--	220	1254	1825
	F	360	--	--	--	360	1758
	Total	1394	--	--	220	1614	3583
Total	M	750461	739965	704979	580951	2776356	13865
	F	747684	719421	695069	566526	2728700	13661
	Total	1498145	1459386	1400048	1147477	5505056	27526

* The frequencies in this table were obtained by weighting each case in Table IV-1 by the appropriate value (School Weight A) to correct for differential sampling ratio and for rate of participation in Project TALENT of the selected schools in the stratum. These weighted frequencies, therefore, are approximately proportional to the corresponding numbers of students in the total U.S. high school population.

** "Age at last birthday" at time of testing (Spring 1960).

*** 1960 census.

Note: The zigzag line represents the progression of modal age groups from grade to grade.

Table IV-3 Theoretical Percentage Distribution* of U.S. High School Students by Age, Grade, and Sex (Ages 12 to 20+; Grades 9-12)

| Age | Sex | Est. % of Sample** | | | | | U.S.pop*** in 1000's |
		Grade 9	Grade 10	Grade 11	Grade 12	Total	
20-21	M	.010	.010	.061	.125	.206	2149
	F	--	.011	.005	.050	.066	2244
	Total	.010	.021	.066	.175	.272	4393
19	M	.009	.030	.156	.649	.844	1108
	F	.004	.015	.052	.304	.375	1168
	Total	.013	.045	.208	.953	1.219	2276
18	M	.030	.195	.810	3.613	4.648	1249
	F	.030	.105	.424	2.812	3.371	1249
	Total	.060	.300	1.234	6.425	8.019	2498
17	M	.303	1.064	4.513	6.108	11.988	1457
	F	.154	.586	3.633	6.950	11.323	1415
	Total	.457	1.650	8.146	13.058	23.311	2872
16	M	1.319	4.720	6.686	.304	13.029	1450
	F	.697	3.882	8.156	.407	13.142	1389
	Total	2.016	8.602	14.842	.711	26.171	2839
15	M	4.860	6.706	.240	.005	11.811	1435
	F	4.287	8.258	.399	.015	12.959	1367
	Total	9.147	14.964	.639	.020	24.770	2802
14	M	6.516	.312	.002	--	6.830	1403
	F	8.335	.409	.002	.004	8.750	1345
	Total	14.851	.721	.004	.004	15.580	2748
13	M	.256	.002	--	--	.258	1789
	F	.368	.006	--	.003	.377	1726
	Total	.624	.008	--	.003	.635	3515
12	M	.014	--	--	.003	.017	1825
	F	.006	--	--	--	.006	1758
	Total	.020	--	--	.003	.023	3583
Total	M	13.317	13.039	12.468	10.807	49.631	13865
	F	13.881	13.272	12.671	10.545	50.369	13661
	Total	27.198	26.311	25.139	21.352	100.000	27526

Note: The zigzag line represents the progression of modal age groups from grade to grade.

*Based on same cases as Table IV-2.
**The percentages are theoretical, not actual, because they have been corrected for differential birth rate in different years.
***1960 Census.

age group. These corrected frequencies have then been converted to percentages of the total sample. It is these percentages that are presented in Table IV-3. This method is intended to provide an indication of what the age-grade bivariate distribution would be if the U. S. population were equal for all ages in the high school range.

From this table, then, although its development involves elements of approximation and although in some of the cells around the fringes it is based on very small numbers of cases, it is possible to get some useful information concerning acceleration, retardation, and dropout, and to draw some important inferences in these areas.

As an example of how the table may be used, let us look at the data for eleventh- and twelfth-graders. From the data in Table IV-3 it may be inferred that 77.2 per cent of 18-year-old eleventh-graders become 19-year-old twelfth-graders, and that 78.9 per cent of 17-year-old eleventh-graders become 18-year-old twelfth-graders. There seems to be about as great a probability, then, that an 18-year-old eleventh-grader will become a 19-year-old twelfth-grader as that a 17-year-old eleventh-grader will become an 18-year-old twelfth-grader.

If we take as one definition of a suitable normative group for high school students those students who are going to reach Grade 12 right on schedule, in other words without any acceleration and without any retardation, and who therefore stand a very good chance of graduating on schedule, we can infer from the Grade 12 column of Table IV-3 that this group consists of 17-year-olds and 18-year-olds in very roughly a five-to-three ratio for boys and a seven-to-three ratio for girls. Applying these same ratios in the lower grades we would infer, for instance, that when the twelfth-grade girls from this group were in Grade 9, 70 per cent of them were 14 years old and 30 per cent were 15. Similarly in Grade 10, 70 per cent of them were 15 and 30 per cent were 16, and in Grade 11, 70 per cent were 16 and 30 per cent were 17. For convenience in the present discussion we shall call the group defined in this manner the "standard group". This group will be referred to again later.

D. The Test Variables

Data are presented in this chapter for the following 18 test variables*, selected to cover a wide variety of aptitudes, abilities, and areas of achievement and information.

1. R-102 Vocabulary Information (Part I)
2. R-105 Social Studies Information
3. R-107 Physical Science Information
4. R-108 Biological Science Information
5. R-111 Electricity and Electronics Information
6. R-112 Mechanical Information
7. R-114 Home Economics Information

*Appendix A-3 presents

8. R-115   Sports Information
9. R-190   Information Part I Total

10. R-230   English Total
11. R-250   Reading Comprehension
12. R-260   Creativity
13. R-270   Mechanical Reasoning
14. R-282   Visualization in Three Dimensions
15. R-290   Abstract Reasoning

16. R-311   Mathematics I. (Arithmetic Reasoning)
17. R-312   Mathematics II.(Introductory high school
        mathematics)

18. F-410   Arithmetic Computation

E.   Relation of Test Scores to Age and Grade

Table IV-4 presents weighted means and standard deviations on 18 TALENT tests or subtests, for boys and girls separately, for each age-grade group. Corresponding means and standard deviations by grade and sex, with all age groups combined, are also shown in the table.

To make direct comparisons among tests possible, Table IV-4 also shows, for the raw score mean for each age-grade-sex group, the corresponding standard score based on the complete group of 15-year-olds. The means and standard deviations used as the basis for determining these standard scores (in other words, the means and standard deviations estimated for the total 15-year-old population on the 18 variables) are shown in Table IV-5, together with the corresponding means and standard deviations for boys and girls separately.

For 12 of the tests the standard score means are also shown graphically in Figures IV-1 to IV-12. These 12 variables are:

R-102   Vocabulary Information (Part I)   (Fig. IV-1)
R-107   Physical Science Information   (Fig. IV-2)
R-111   Electricity and Electronics Info.   (Fig. IV-3)
R-112   Mechanical Information   (Fig. IV-4)
R-190   Information Part I Total   (Fig. IV-5)
R-230   English Total   (Fig. IV-6)
R-250   Reading Comprehension   (Fig. IV-7)
R-260   Creativity   (Fig. IV-8)
R-282   Visualization in Three Dimensions   (Fig. IV-9)
R-290   Abstract Reasoning   (Fig. IV-10)
R-311   Mathematics I.(Arithmetic Reasoning)   (Fig. IV-11)
R-312   Mathematics II.(Introd. h. s. math.)   (Fig. IV-12)

In these graphs, only five points were plotted for each grade, to eliminate most of the means based on very small numbers of cases. Each graph consists of four curves, corresponding to the four high school

Table IV-4. Weighted means, corresponding standard deviations, and correspond-
ing N's, by grade, age, and sex, on selected Project TALENT Tests

(For students in Grades 9-12; ages 12 to 20+; cases with complete data only;
Subsample 0)

This table consists of 18 sections as follows:

Section	Variable	
A	R-102	Vocabulary Information (Part I)
B	R-105	Social Studies Information
C	R-107	Physical Science Information
D	R-108	Biological Science Information
E	R-111	Electricity and Electronics Information
F	R-112	Mechanical Information
G	R-114	Home Economics Information
H	R-115	Sports Information
I	R-190	Information Part I Total
J	R-230	English Total
K	R-250	Reading Comprehension
L	R-260	Creativity
M	R-270	Mechanical Reasoning
N	R-282	Visualization in Three Dimensions
O	R-290	Abstract Reasoning
P	R-311	Mathematics I (Arithmetic Reasoning)
Q	R-312	Mathematics II (Introductory high school mathematics)
R	F-410	Arithmetic Computation

The means and standard deviations are based on data weighted to provide an
estimate of the values for the national population of high school students.
(School Weight "A" was used for this purpose.) N is the corresponding
weighted number of cases. The N's, thus, are approximately proportional
to the numbers of students in the population.

The notation used in this table is as follows:

N' = number of students in Project TALENT sample (unweighted)

N = weighted number of cases

σ = standard deviation of weighted cases

M = mean of weighted cases

z = standard score corresponding to M. The
standard scores are based on the estimated
means and standard deviations for the total
population of 15-year-olds (boys and girls
combined). (These means and standard devia-
tions are shown in Table IV-5.)

Table IV-4 (cont.)

Section A. R-102 Vocabulary Info (Part I)

Gr.	Age	Boys N'	N in 100's	M	σ	z	Girls N'	N in 100's	M	σ	z
9	12	7	10	13.901	2.323	0.65	3	4	14.333	1.248	0.75
9	13	96	181	11.493	4.581	0.09	131	251	9.747	4.357	-0.32
9	14	1719	3608	11.771	3.822	0.15	2110	4424	10.338	3.758	-0.19
9	15	1323	2752	10.441	4.109	-0.16	1141	2313	9.115	3.909	-0.47
9	16	356	755	8.446	3.621	-0.63	177	382	6.695	3.419	-1.04
9	17	79	174	7.395	3.271	-0.88	36	86	5.931	2.898	-1.22
9	18	6	15	7.492	3.025	-0.86	6	15	5.018	2.059	-1.44
9	19	2	4	7.557	3.500	-0.84	1	2	8.000	.000	-0.74
9	20+	2	4	2.453	1.499	-2.04	0	0			
9	Tot	3590	7505	10.827	4.091	-0.07	3605	7477	9.693	3.931	-0.34
10	12	0	0				0	0			
10	13	1	1	15.000	.000	0.91	3	4	12.000	3.742	0.20
10	14	91	173	12.924	4.541	0.42	113	217	11.940	4.219	0.19
10	15	1810	3798	13.007	3.889	0.44	2118	4455	11.561	3.951	0.10
10	16	1294	2701	11.603	4.057	0.11	1038	2128	10.413	4.040	-0.17
10	17	290	612	9.773	3.558	-0.32	150	327	8.198	3.309	-0.69
10	18	46	96	8.433	3.472	-0.63	22	52	6.114	2.592	-1.18
10	19	6	13	7.583	2.645	-0.83	2	7	9.000	.000	-0.50
10	20+	2	4	7.454	2.500	-0.87	1	5	7.000	.000	-0.97
10	Tot	3540	7400	12.153	4.083	0.24	3447	7194	11.035	4.056	-0.02
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	19.000	.000	1.85	1	1	12.000	.000	0.20
11	15	73	136	14.748	3.640	0.85	111	215	12.501	4.490	0.32
11	16	1815	3826	13.896	3.747	0.65	2161	4471	12.185	3.997	0.25
11	17	1228	2595	12.714	3.978	0.37	971	2029	11.047	4.045	-0.02
11	18	180	399	10.039	3.970	-0.26	100	209	8.376	3.356	-0.65
11	19	32	68	8.586	4.509	-0.60	12	24	6.577	2.827	-1.07
11	20+	13	26	9.166	4.507	-0.46	1	2	9.000	.000	-0.50
11	Tot	3342	7050	13.191	4.012	0.48	3357	6951	11.728	4.094	0.14
12	12	1	2	20.000	.000	2.08	0	0			
12	13	0	0				1	2	15.000	.000	0.91
12	14	0	0				1	2	11.000	.000	-0.03
12	15	2	3	10.750	.968	-0.09	5	8	13.844	3.683	0.64
12	16	88	174	14.868	3.534	0.88	116	223	12.554	4.217	0.34
12	17	1688	3512	14.717	3.501	0.84	1923	3881	13.047	3.941	0.45
12	18	868	1781	13.121	3.787	0.47	692	1386	12.086	4.102	0.22
12	19	136	284	11.021	3.459	-0.03	68	140	7.947	3.530	-0.75
12	20+	24	53	9.170	3.358	-0.46	9	22	7.830	3.008	-0.78
12	Tot	2807	5810	14.000	3.755	0.67	2815	5665	12.647	4.081	0.36

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.)   41

Section B. R-105 Social Studies Information

		Boys					Girls				
Gr.	Age	N'	N in 100's	M	σ	z	N'	N in 100's	M	σ	z
9	12	7	10	17.526	5.172	0.86	3	4	17.333	2.625	0.82
9	13	96	181	14.658	5.794	0.34	131	251	11.579	5.479	-0.22
9	14	1719	3608	14.110	5.402	0.24	2110	4424	12.048	4.653	-0.14
9	15	1323	2752	12.242	5.482	-0.10	1141	2313	10.310	4.892	-0.46
9	16	356	755	9.363	.4.503	-0.63	177	382	7.483	4.182	-0.97
9	17	79	174	7.387	4.288	-0.99	36	86	6.904	4.086	-1.08
9	18	6	15	8.261	3.733	-0.83	6	15	7.455	3.479	-0.98
9	19	2	4	9.621	7.499	-0.58	1	2	8.000	.000	-0.88
9	20+	2	4	3.937	1.999	-1.62	0	0			
	Tot	3590	7505	12.789	5.607	0.00	3605	7477	11.194	4.896	-0.30
10	12	0	0				0	0			
10	13	1	1	23.000	.000	1.85	3	4	18.333	4.497	1.00
10	14	91	173	15.976	5.291	0.58	113	217	13.609	5.487	0.14
10	15	1810	3798	15.609	5.070	0.51	2118	4455	13.097	4.851	0.05
10	16	1294	2701	13.366	5.567	0.10	1038	2128	11.528	4.767	-0.23
10	17	290	612	10.714	4.831	-0.38	150	327	8.696	4.184	-0.75
10	18	46	96	8.853	4.924	-0.72	22	52	7.788	2.756	-0.92
10	19	6	13	11.905	5.427	-0.17	2	7	13.000	.000	0.03
10	20+	2	4	8.944	3.000	-0.70	1	5	14.000	.000	0.22
	Tot	3540	7400	14.297	5.497	0.27	3447	7194	12.413	4.942	-0.07
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	23.000	.000	1.85	1	1	22.000	.000	1.67
11	15	73	136	18.313	4.548	1.00	111	215	14.258	5.537	0.26
11	16	1815	3826	16.991	4.914	0.76	2161	4471	14.744	4.918	0.35
11	17	1228	2595	15.411	5.323	0.47	971	2029	13.174	5.112	0.07
11	18	180	399	11.962	5.453	-0.16	100	209	9.942	4.033	-0.52
11	19	32	68	11.047	6.450	-0.32	12	24	7.387	3.074	-0.99
11	20+	13	26	11.953	6.497	-0.16	1	2	11.000	.000	-0.33
	Tot	3342	7050	16.075	5.306	0.59	3357	6951	14.101	5.085	0.23
12	12	1	2	21.000	.000	1.49	0	0			
12	13	0	0				1	2	13.000	.000	0.03
12	14	0	0				1	2	19.000	.000	1.13
12	15	2	3	15.375	4.357	0.47	5	8	16.557	2.907	0.68
12	16	88	174	17.642	5.041	0.88	116	223	14.820	4.708	0.36
12	17	1688	3512	17.481	4.525	0.85	1923	3881	15.032	4.705	0.40
12	18	868	1781	15.670	4.971	0.52	692	1386	13.949	4.956	0.21
12	19	136	284	13.229	4.988	0.08	68	140	9.883	4.450	-0.53
12	20+	24	53	10.360	4.440	-0.45	9	22	8.563	4.919	-0.77
	Tot	2807	5810	16.658	4.879	0.70	2815	5665	14.608	4.856	0.33

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.)

Section C. R-107 Physical Sciences Information

Gr.	Age	Boys					Girls				
		N'	N in 100's	M	σ	z	N'	N in 100's	M	σ	z
9	12	7	10	8.919	5.020	0.29	3	4	11.667	2.357	1.00
9	13	96	181	9.324	4.062	0.40	131	251	7.643	3.622	-0.04
9	14	1719	3608	9.163	3.750	0.36	2110	4424	7.290	3.412	-0.13
9	15	1323	2752	8.031	3.738	0.06	1141	2313	6.539	3.355	-0.32
9	16	356	755	6.467	3.305	-0.34	177	382	4.634	3.011	-0.81
9	17	79	174	5.197	2.850	-0.67	36	86	4.185	2.208	-0.93
9	18	6	15	4.606	1.554	-0.82	6	15	4.977	3.153	-0.73
9	19	2	4	3.557	3.500	-1.09	1	2	7.000	.000	-0.20
9	20+	2	4	4.516	.500	-0.84	0	0			
9	Tot	3590	7505	8.373	3.825	0.15	3605	7477	6.895	3.445	-0.23
10	12	0	0				0	0			
10	13	1	1	13.000	.000	1.35	3	4	7.333	3.091	-0.12
10	14	91	173	9.471	4.471	0.43	113	217	7.753	3.547	-0.01
10	15	1810	3798	9.608	3.769	0.47	2118	4455	7.462	3.416	-0.08
10	16	1294	2701	8.361	3.864	0.15	1038	2128	6.663	3.419	-0.29
10	17	290	612	6.838	3.409	-0.25	150	327	4.847	2.545	-0.76
10	18	46	96	4.774	3.119	-0.78	22	52	3.067	1.604	-1.22
10	19	6	13	8.060	3.316	0.07	2	7	7.307	.461	-0.12
10	20+	2	4	7.546	2.500	-0.06	1	5	7.000	.000	-0.20
10	Tot	3540	7400	8.854	3.908	0.28	3447	7194	7.084	3.447	-0.18
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	13.000	.000	1.35	1	1	10.000	.000	0.57
11	15	73	136	10.807	4.162	0.78	111	215	8.020	3.964	0.06
11	16	1815	3826	10.246	4.038	0.63	2161	4471	7.287	3.652	-0.13
11	17	1228	2595	9.190	4.073	0.36	971	2029	6.541	3.671	-0.32
11	18	180	399	7.107	3.544	-0.18	100	209	4.568	2.631	-0.83
11	19	32	68	5.094	3.648	-0.70	12	24	3.999	2.417	-0.98
11	20+	13	26	6.017	3.515	-0.46	1	2	4.000	.000	-0.98
11	Tot	3342	7050	9.626	4.133	0.47	3357	6951	6.998	3.686	-0.20
12	12	1	2	17.000	.000	2.38	0	0			
12	13	0	0				1	2	11.000	.000	0.83
12	14	0	0				1	2	8.000	.000	0.05
12	15	2	3	6.500	1.936	-0.33	5	8	9.263	3.613	0.38
12	16	88	174	11.435	4.455	0.94	116	223	7.069	3.902	-0.19
12	17	1688	3512	11.018	4.141	0.83	1923	3881	7.524	4.030	-0.07
12	18	868	1781	9.650	4.325	0.48	692	1386	6.765	3.874	-0.26
12	19	136	284	7.530	3.920	-0.07	68	140	4.408	2.513	-0.87
12	20+	24	53	5.924	3.123	-0.48	9	22	3.495	2.381	-1.11
12	Tot	2807	5810	10.394	4.311	0.67	2815	5665	7.231	3.997	-0.14

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.)

Section D. R-108 Biological Sciences Information

Gr.	Age	Boys N'	N in 100's	M	σ	z	Girls N'	N in 100's	M	σ	z
9	12	7	10	7.652	1.801	0.86	3	4	4.333	2.055	-0.49
9	13	96	181	5.543	2.286	0.00	131	251	4.617	2.338	-0.38
9	14	1719	3608	5.752	2.326	0.09	2110	4424	4.746	2.206	-0.32
9	15	1323	2752	5.235	2.455	-0.12	1141	2313	4.498	2.244	-0.42
9	16	356	755	4.231	2.128	-0.53	177	382	3.379	1.898	-0.88
9	17	79	174	3.997	2.072	-0.63	36	86	2.584	1.656	-1.20
9	18	6	15	4.707	1.002	-0.34	6	15	3.265	1.462	-0.93
9	19	2	4	3.524	1.500	-0.82	1	2	5.000	.000	-0.22
9	20+	2	4	1.000	.000	-1.85	0	0			
	Tot	3590	7505	5.360	2.403	-0.07	3605	7477	4.567	2.233	-0.40
10	12	0	0				0	0			
10	13	1	1	7.000	.000	0.59	3	4	3.333	.943	-0.90
10	14	91	173	6.702	2.187	0.47	113	217	5.372	2.305	-0.07
10	15	1810	3798	6.798	2.286	0.51	2118	4455	5.895	2.196	0.14
10	16	1294	2701	6.136	2.424	0.24	1038	2128	5.490	2.309	-0.02
10	17	290	612	5.163	2.225	-0.15	150	327	4.378	1.995	-0.47
10	18	46	96	4.403	2.289	-0.46	22	52	3.334	1.573	-0.90
10	19	6	13	5.582	2.950	0.02	2	7	5.307	.461	-0.10
10	20+	2	4	5.472	1.500	-0.03	1	5	3.000	.000	-1.03
	Tot	3540	7400	6.385	2.392	0.34	3447	7194	5.668	2.256	0.05
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	10.000	.000	1.81	1	1	7.000	.000	0.59
11	15	73	136	7.350	2.086	0.74	111	215	6.158	2.442	0.25
11	16	1815	3826	6.901	2.198	0.55	2161	4471	5.827	2.170	0.12
11	17	1228	2595	6.486	2.265	0.38	971	2029	5.570	2.152	0.01
11	18	180	399	5.484	2.327	-0.02	100	209	4.211	2.013	-0.54
11	19	32	68	5.098	2.372	-0.18	12	24	3.810	1.717	-0.70
11	20+	13	26	4.601	2.113	-0.38	1	2	5.000	.000	-0.22
	Tot	3342	7050	6.651	2.267	0.45	3357	6951	5.706	2.191	0.07
12	12	1	2	10.000	.000	1.81	0	0			
12	13	0	0				1	2	8.000	.000	1.00
12	14	0	0				1	2	7.000	.000	0.59
12	15	2	3	8.000	.000	1.00	5	8	6.090	1.933	0.22
12	16	88	174	6.597	2.221	0.43	116	223	5.652	2.350	0.05
12	17	1688	3512	7.033	2.139	0.61	1923	3881	5.930	2.184	0.16
12	18	868	1781	6.560	2.255	0.41	692	1386	5.753	2.254	0.09
12	19	136	284	5.568	2.254	0.01	68	140	4.456	1.834	-0.44
12	20+	24	53	5.547	2.185	0.00	9	22	4.097	1.788	-0.59
	Tot	2807	5810	6.791	2.215	0.51	2815	5665	5.834	2.214	0.12

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.)

Section E. R-111 Electricity and Electronics Information

Gr.	Age	Boys N'	N in 100's	M	σ	z	Girls N'	N in 100's	M	σ	z
9	12	7	10	7.294	4.597	0.15	3	4	4.667	1.700	-0.55
9	13	96	181	7.972	4.052	0.33	131	251	5.444	2.683	-0.34
9	14	1719	3608	8.167	3.977	0.39	2110	4424	5.337	2.500	-0.37
9	15	1323	2752	7.512	3.847	0.21	1141	2313	5.017	2.531	-0.45
9	16	356	755	6.572	3.499	-0.04	177	382	4.230	2.277	-0.66
9	17	79	174	5.369	3.014	-0.36	36	86	4.418	1.997	-0.61
9	18	6	15	5.945	3.198	-0.21	6	15	2.749	1.655	-1.06
9	19	2	4	5.573	4.499	-0.30	1	2	4.000	.000	-0.72
9	20+	2	4	2.906	2.999	-1.02	0	0			
	Tot	3590	7505	7.686	3.916	0.26	3605	7477	5.169	2.516	-0.41
10	12	0	0				0	0			
10	13	1	1	8.000	.000	0.34	3	4	3.333	.472	-0.90
10	14	91	173	9.127	4.781	0.64	113	217	5.337	2.473	-0.37
10	15	1810	3798	9.159	4.144	0.65	2118	4455	5.561	2.481	-0.31
10	16	1294	2701	8.517	4.175	0.48	1038	2128	5.266	2.518	-0.39
10	17	290	612	7.514	3.585	0.21	150	327	4.853	2.340	-0.50
10	18	46	96	6.251	4.049	-0.12	22	52	3.583	1.946	-0.84
10	19	6	13	7.596	4.346	0.23	2	7	4.307	.461	-0.64
10	20+	2	4	10.000	.000	0.87	1	5	1.000	.000	-1.52
	Tot	3540	7400	8.748	4.164	0.54	3447	7194	5.415	2.495	-0.35
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	14.000	.000	1.94	1	1	5.000	.000	-0.46
11	15	73	136	9.425	4.309	0.72	111	215	5.648	2.822	-0.28
11	16	1815	3826	9.942	4.197	0.86	2161	4471	5.662	2.610	-0.28
11	17	1228	2595	9.546	4.141	0.75	971	2029	5.248	2.672	-0.39
11	18	180	399	7.856	4.031	0.30	100	209	4.885	2.357	-0.49
11	19	32	68	6.813	4.280	0.03	12	24	4.341	2.638	-0.63
11	20+	13	26	6.721	4.785	0.00	1	2	6.000	.000	-0.19
	Tot	3342	7050	9.627	4.213	0.78	3357	6951	5.513	2.637	-0.32
12	12	1	2	15.000	.000	2.21	0	0			
12	13	0	0				1	2	11.000	.000	1.14
12	14	0	0				1	2	10.000	.000	0.87
12	15	2	3	8.375	3.389	0.44	5	8	4.308	2.357	-0.64
12	16	88	174	10.814	4.621	1.09	116	223	5.893	2.604	-0.22
12	17	1688	3512	10.953	4.309	1.13	1923	3881	5.910	2.812	-0.22
12	18	868	1781	10.102	4.513	0.90	692	1386	5.612	2.807	-0.29
12	19	136	284	8.465	4.370	0.47	68	140	4.459	2.464	-0.60
12	20+	24	53	6.304	3.000	-0.11	9	22	4.454	2.145	-0.60
	Tot	2807	5810	10.524	4.436	1.01	2815	5665	5.796	2.806	-0.25

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.)

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Section F. R-112 Mechanical Information

Gr.	Age	Boys					Girls				
		N'	N in 100's	M	σ	z	N'	N in 100's	M	σ	z
9	12	7	10	9.625	2.994	0.17	3	4	5.667	1.700	-0.86
9	13	96	181	10.265	3.352	0.34	131	251	6.953	2.937	-0.52
9	14	1719	3608	11.039	3.273	0.54	2110	4424	7.205	2.747	-0.46
9	15	1323	2752	10.409	3.616	0.37	1141	2313	6.711	2.728	-0.59
9	16	356	755	8.934	3.713	-0.01	177	382	5.271	2.437	-0.96
9	17	79	174	7.657	3.329	-0.34	36	86	4.931	2.117	-1.05
9	18	6	15	7.433	2.718	-0.40	6	15	3.953	2.584	-1.31
9	19	2	4	7.589	5.499	-0.36	1	2	6.000	.000	-0.77
9	20+	2	4	4.969	1.000	-1.04	0	0			
	Tot	3590	7505	10.485	3.539	0.39	3605	7477	6.911	2.773	-0.54
10	12	0	0				0	0			
10	13	1	1	11.000	.000	0.53	3	4	5.667	2.055	-0.86
10	14	91	173	11.241	3.392	0.59	113	217	6.898	2.566	-0.54
10	15	1810	3798	12.030	3.297	0.80	2118	4455	7.632	2.781	-0.35
10	16	1294	2701	11.612	3.421	0.69	1038	2128	7.415	2.826	-0.40
10	17	290	612	10.529	3.640	0.41	150	327	6.157	2.715	-0.73
10	18	46	96	9.248	4.064	0.07	22	52	6.370	2.578	-0.68
10	19	6	13	6.909	3.422	-0.54	2	7	6.693	.462	-0.59
10	20+	2	4	8.981	1.001	0.00	1	5	5.000	.000	-1.03
	Tot	3540	7400	11.688	3.428	0.71	3447	7194	7.466	2.803	-0.39
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	10.000	.000	0.27	1	1	6.000	.000	-0.77
11	15	73	136	11.621	3.208	0.69	111	215	7.798	3.164	-0.30
11	16	1815	3826	13.181	3.007	1.10	2161	4471	8.119	2.922	-0.22
11	17	1228	2595	12.669	3.271	0.96	971	2029	7.794	2.881	-0.31
11	18	180	399	11.172	3.672	0.57	100	209	6.761	2.818	-0.57
11	19	32	68	10.041	4.652	0.28	12	24	5.691	2.240	-0.85
11	20+	13	26	9.366	4.727	0.10	1	2	8.000	.000	-0.25
	Tot	3342	7050	12.804	3.237	1.00	3357	6951	7.965	2.927	-0.26
12	12	1	2	16.000	.000	1.83	0	0			
12	13	0	0				1	2	10.000	.000	0.27
12	14	0	0				1	2	7.000	.000	-0.51
12	15	2	3	14.000	3.873	1.31	5	8	6.507	1.663	-0.64
12	16	88	174	13.352	2.639	1.14	116	223	8.157	3.294	-0.21
12	17	1688	3512	13.910	2.903	1.29	1923	3881	8.801	3.036	-0.04
12	18	868	1781	13.316	3.257	1.13	692	1386	8.476	2.992	-0.13
12	19	136	284	11.913	3.356	0.77	68	140	7.326	2.997	-0.43
12	20+	24	53	10.473	3.502	0.39	9	22	6.766	2.634	-0.57
	Tot	2807	5810	13.583	3.089	1.20	2815	5665	8.648	3.047	-0.08

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.)

Section G. R-114 Home Economics Information

Gr.	Age	N'	N in 100's	M	σ	z	N'	N in 100's	M	σ	z
		Boys					**Girls**				
9	12	7	10	6.420	2.770	-0.86	3	4	11.667	1.700	0.51
9	13	96	181	7.556	2.979	-0.56	131	251	10.333	3.132	0.16
9	14	1719	3608	7.710	2.730	-0.52	2110	4424	11.482	3.240	0.46
9	15	1323	2752	7.320	3.032	-0.62	1141	2313	11.049	3.397	0.35
9	16	356	755	6.335	2.720	-0.88	177	382	8.717	3.354	-0.26
9	17	79	174	5.952	2.773	-0.98	36	86	8.201	4.042	-0.39
9	18	6	15	6.505	1.970	-0.84	6	15	8.725	2.492	-0.26
9	19	2	4	6.032	2.000	-0.96	1	2	12.000	.000	0.60
9	20+	2	4	4.031	1.000	-1.48	0	0			
	Tot	3590	7505	7.377	2.887	-0.61	3605	7477	11.125	3.375	0.37
10	12	0	0				0	0			
10	13	1	1	9.000	.000	-0.19	3	4	9.000	2.944	-0.19
10	14	91	173	8.573	3.251	-0.30	113	217	11.894	2.882	0.57
10	15	1810	3798	8.472	2.931	-0.32	2118	4455	12.458	3.273	0.72
10	16	1294	2701	8.142	2.997	-0.41	1038	2128	12.244	3.314	0.66
10	17	290	612	7.137	2.673	-0.67	150	327	11.021	3.232	0.34
10	18	46	96	6.446	3.147	-0.85	22	52	10.911	3.730	0.31
10	19	6	13	5.276	2.239	-1.16	2	7	12.226	1.845	0.66
10	20+	2	4	5.509	.500	-1.10	1	5	11.000	.000	0.34
	Tot	3540	7400	8.210	2.977	-0.39	3447	7194	12.298	3.291	0.68
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	10.000	.000	.08	1	1	16.000	.000	1.64
11	15	73	136	8.878	2.566	-0.22	111	215	12.593	3.453	0.75
11	16	1815	3826	9.150	2.897	-0.15	2161	4471	13.164	3.203	0.90
11	17	1228	2595	8.518	2.923	-0.31	971	2029	12.685	3.208	0.78
11	18	180	399	7.626	2.536	-0.54	100	209	10.535	3.271	0.22
11	19	32	68	6.990	3.253	-0.71	12	24	8.775	2.800	-0.24
11	20+	13	26	7.509	3.635	-0.57	1	2	9.000	.000	-0.19
	Tot	3342	7050	8.799	2.924	-0.24	3357	6951	12.912	3.258	0.84
12	12	1	2	14.000	.000	1.12	0	0			
12	13	0	0				1	2	15.000	.000	1.38
12	14	0	0				1	2	15.000	.000	1.38
12	15	2	3	7.250	.968	-0.64	5	8	10.393	.899	0.18
12	16	88	174	9.184	2.806	-0.14	116	223	12.886	3.659	0.83
12	17	1688	3512	9.488	2.878	-0.06	1923	3881	13.929	3.120	1.10
12	18	868	1781	8.861	2.879	-0.22	692	1386	13.303	3.255	0.94
12	19	136	284	8.076	2.487	-0.43	68	140	11.819	3.313	0.55
12	20+	24	53	7.307	2.137	-0.63	9	22	11.289	4.278	0.41
	Tot	2807	5810	9.198	2.884	-0.13	2815	5665	13.668	3.219	1.03

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.) 47

Section H. R-115 Sports Information

Gr.	Age	N'	N in 100's	M	σ	z	N'	N in 100's	M	σ	z
				Boys					**Girls**		
9	12	7	10	7.509	2.027	0.44	3	4	5.000	.816	-0.40
9	13	96	181	7.388	3.059	0.40	131	251	4.284	2.280	-0.63
9	14	1719	3608	7.477	3.030	0.43	2110	4424	4.936	2.287	-0.42
9	15	1323	2752	6.509	3.007	0.11	1141	2313	4.375	2.295	-0.60
9	16	356	755	4.928	2.624	-0.42	177	382	3.370	1.839	-0.94
9	17	79	174	4.201	1.830	-0.66	36	86	3.240	1.644	-0.98
9	18	6	15	4.930	2.478	-0.42	6	15	4.022	2.468	-0.72
9	19	2	4	2.540	2.500	-1.21	1	2	3.000	.000	-1.06
9	20+	2	4	1.453	1.499	-1.57	0	0			
	Tot	3590	7505	6.776	3.090	0.19	3605	7477	4.639	2.302	-0.51
10	12	0	0				0	0			
10	13	1	1	8.000	.000	0.60	3	4	3.667	2.495	-0.84
10	14	91	173	7.998	2.708	0.60	113	217	5.036	2.472	-0.38
10	15	1810	3798	8.212	2.996	0.67	2118	4455	5.478	2.357	-0.24
10	16	1294	2701	7.291	3.016	0.36	1038	2128	5.047	2.358	-0.38
10	17	290	612	6.115	2.795	-0.03	150	327	3.675	1.906	-0.83
10	18	46	96	4.772	2.350	-0.47	22	52	3.159	2.056	-1.01
10	19	6	13	5.025	1.313	-0.39	2	7	8.080	1.383	0.63
10	20+	2	4	4.472	1.500	-0.57	1	5	5.000	.000	-0.40
	Tot	3540	7400	7.645	3.059	0.48	3447	7194	5.240	2.381	-0.32
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	9.000	.000	0.93	1	1	2.000	.000	-1.39
11	15	73	136	9.233	2.966	1.01	111	215	5.400	2.402	-0.26
11	16	1815	3826	8.711	2.921	0.84	2161	4471	5.809	2.416	-0.13
11	17	1228	2595	7.871	2.906	0.56	971	2029	5.165	2.424	-0.34
11	18	180	399	6.194	2.903	0.00	100	209	4.287	2.248	-0.63
11	19	32	68	5.567	2.820	-0.21	12	24	3.572	2.295	-0.87
11	20+	13	26	5.453	3.840	-0.25	1	2	1.000	.000	-1.72
	Tot	3342	7050	8.227	3.006	0.67	3357	6951	5.553	2.444	-0.21
12	12	1	2	14.000	.000	2.59	0	0			
12	13	0	0				1	2	8.000	.000	0.60
12	14	0	0				1	2	5.000	.000	-0.40
12	15	2	3	8.250	2.905	0.68	5	8	5.927	2.089	-0.09
12	16	88	174	9.424	2.765	1.07	116	223	5.597	2.545	-0.20
12	17	1688	3512	9.215	2.762	1.00	1923	3881	6.137	2.527	-0.02
12	18	868	1781	8.288	2.989	0.70	692	1386	5.745	2.422	-0.15
12	19	136	284	6.896	2.857	0.23	68	140	3.982	2.159	-0.73
12	20+	24	53	5.845	2.463	-0.12	9	22	2.683	2.276	-1.16
	Tot	2807	5810	8.794	2.916	0.86	2815	5665	5.953	2.527	-0.08

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.)

Section I. R-190 Information Part I Total

Gr.	Age	Boys					Girls				
		N'	N in 100's	M	σ	z	N'	N in 100's	M	σ	z
9	12	7	10	144.67	32.60	0.66	3	4	134.50	16.33	0.38
9	13	96	181	127.76	40.82	0.20	131	251	109.09	34.67	-0.30
9	14	1719	3608	127.56	35.44	0.20	2110	4424	112.29	29.02	-0.21
9	15	1323	2752	115.11	36.79	-0.14	1141	2313	102.38	30.69	-0.48
9	16	356	755	94.93	30.46	-0.68	177	382	79.96	27.02	-1.08
9	17	79	174	82.51	28.57	-1.02	36	86	73.14	27.21	-1.27
9	18	6	15	82.86	17.14	-1.01	6	15	71.76	21.97	-1.30
9	19	2	4	80.23	44.99	-1.08	1	2	94.50	0.00	-0.69
9	20+	2	4	44.19	10.00	-2.04	0	0			
9	Tot	3590	7505	118.53	37.35	-0.05	3605	7477	106.94	30.88	-0.36
10	12	0	0				0	0			
10	13	1	1	174.50	0.00	1.46	3	4	121.17	33.00	0.02
10	14	91	173	142.82	40.71	0.61	113	217	122.48	31.94	0.06
10	15	1810	3798	141.48	35.15	0.57	2118	4455	122.93	30.63	0.07
10	16	1294	2701	127.92	37.28	0.20	1038	2128	113.86	31.24	-0.17
10	17	290	612	108.97	31.89	-0.30	150	327	92.80	24.81	-0.74
10	18	46	96	92.91	34.60	-0.74	22	52	81.49	17.51	-1.04
10	19	6	13	101.74	29.01	-0.50	2	7	121.43	4.63	0.03
10	20+	2	4	99.22	15.00	-0.57	1	5	94.50	0.00	-0.69
10	Tot	3540	7400	133.15	37.44	0.35	3447	7194	118.54	31.47	-0.05
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	194.50	0.00	1.99	1	1	154.50	0.00	0.92
11	15	73	136	155.35	35.59	0.94	111	215	131.00	36.60	0.29
11	16	1815	3826	151.82	35.66	0.85	2161	4471	129.24	32.13	0.24
11	17	1228	2595	140.12	37.36	0.53	971	2029	118.66	32.79	-0.04
11	18	180	399	114.82	34.44	-0.15	100	209	94.24	24.68	-0.70
11	19	32	68	103.33	45.16	-0.46	12	24	77.11	23.97	-1.16
11	20+	13	26	102.07	42.00	-0.49	1	2	104.50	0.00	-0.42
11	Tot	3342	7050	144.85	37.86	0.66	3357	6951	124.97	33.18	0.13
12	12	1	2	214.50	0.00	2.53	0	0			
12	13	0	0				1	2	154.50	0.00	0.92
12	14	0	0				1	2	134.50	0.00	0.38
12	15	2	3	129.50	19.36	0.25	5	8	134.62	25.64	0.39
12	16	88	174	161.04	35.78	1.09	116	223	129.85	34.95	0.26
12	17	1688	3512	160.22	33.98	1.07	1923	3881	135.31	32.97	0.40
12	18	868	1781	145.07	37.50	0.67	692	1386	127.18	33.90	0.19
12	19	136	284	122.65	33.70	0.06	68	140	96.98	26.60	-0.63
12	20+	24	53	104.42	24.14	- .43	9	22	88.32	29.05	-0.86
12	Tot	2807	5810	153.25	36.74	0.89	2815	5665	131.98	33.87	0.31

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.)

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Section J. R-230 English Total

Gr.	Age	Boys					Girls				
		N'	N in 100's	M	σ	z	N'	N in 100's	M	σ	z
9	12	7	10	87.00	6.82	0.60	3	4	90.34	10.28	0.82
9	13	96	181	76.56	16.55	-0.07	131	251	80.04	13.16	0.15
9	14	1719	3608	75.95	13.22	-0.11	2110	4424	81.44	11.60	0.24
9	15	1323	2752	71.08	15.09	-0.42	1141	2313	76.80	13.74	-0.06
9	16	356	755	61.66	15.38	-1.03	177	382	68.22	13.49	-0.61
9	17	79	174	58.57	13.98	-1.23	36	86	62.70	9.19	-0.96
9	18	6	15	59.44	8.46	-1.17	6	15	55.63	11.59	-1.42
9	19	2	4	52.54	15.00	-1.62	1	2	77.00	0.00	-0.04
9	20+	2	4	44.26	7.50	-2.15	0	0			
	Tot	3590	7505	72.29	15.08	-0.35	3605	7477	79.02	13.03	0.09
10	12	0	0				0	0			
10	13	1	1	92.00	0.00	0.92	3	4	82.00	10.80	0.28
10	14	91	173	79.70	15.70	0.13	113	217	85.74	12.11	0.52
10	15	1810	3798	79.36	13.28	0.11	2118	4455	84.88	11.10	0.46
10	16	1294	2701	74.22	14.14	-0.22	1038	2128	81.04	12.58	0.22
10	17	290	612	67.14	13.12	-0.68	150	327	71.57	12.51	-0.39
10	18	46	96	60.04	17.32	-1.13	22	52	69.96	12.23	-0.50
10	19	6	13	67.96	15.36	-0.62	2	7	76.60	6.92	-0.07
10	20+	2	4	61.90	5.00	-1.01	1	5	77.00	0.00	-0.04
	Tot	3540	7400	76.20	14.32	-0.09	3447	7194	83.05	12.11	0.35
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	102.00	0.00	1.57	1	1	87.00	0.00	0.60
11	15	73	136	83.59	11.28	0.38	111	215	86.10	11.82	0.54
11	16	1815	3826	82.10	12.62	0.29	2161	4471	87.22	11.14	0.61
11	17	1228	2595	78.15	13.22	0.03	971	2029	83.88	11.72	0.40
11	18	180	399	69.88	14.14	-0.50	100	209	74.10	11.40	-0.23
11	19	32	68	65.61	21.04	-0.78	12	24	64.80	12.90	-0.83
11	20+	13	26	64.56	18.46	-0.84	1	2	77.00	0.00	-0.04
	Tot	3342	7050	79.76	13.51	0.13	3357	6951	85.73	11.70	0.52
12	12	1	2	87.00	0.00	0.60	0	0			
12	13	0	0				1	2	77.00	0.00	-0.04
12	14	0	0				1	2	82.00	0.00	0.28
12	15	2	3	77.62	7.26	0.00	5	8	92.84	11.35	0.98
12	16	88	174	85.46	12.22	0.50	116	223	89.43	13.10	0.76
12	17	1688	3512	84.77	12.88	0.46	1923	3881	89.88	10.67	0.79
12	18	868	1781	80.06	13.86	0.15	692	1386	86.98	12.36	0.60
12	19	136	284	71.50	14.27	-0.40	68	140	77.62	11.28	0.00
12	20+	24	53	66.94	9.16	-0.69	9	22	72.90	13.16	-0.31
	Tot	2807	5810	82.53	13.70	0.31	2815	5665	88.78	11.48	0.72

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.)

Section K.   R-250   Reading Comprehension

Gr.	Age	Boys N'	N in 100's	M	σ	z	Girls N'	N in 100's	M	σ	z
9	12	7	10	34.86	7.33	0.69	3	4	38.50	1.63	1.02
9	13	96	181	27.71	10.99	0.05	131	251	26.48	11.52	-0.06
9	14	1719	3608	26.58	10.72	-0.05	2110	4424	27.11	9.74	0.00
9	15	1323	2752	22.85	10.81	-0.38	1141	2313	23.71	10.15	-0.31
9	16	356	755	16.92	8.42	-0.92	177	382	17.76	8.69	-0.84
9	17	79	174	15.36	7.51	-1.06	36	86	15.18	7.34	-1.07
9	18	6	15	14.97	5.53	-1.09	6	15	9.50	4.10	-1.58
9	19	2	4	17.65	9.00	-0.85	1	2	26.50	0.00	-0.06
9	20+	2	4	11.47	1.00	-1.41	0	0			
	Tot	3590	7505	23.98	11.00	-0.28	3605	7477	25.39	10.22	-0.16
10	12	0	0				0	0			
10	13	1	1	44.50	0.00	1.56	3	4	30.50	9.09	0.30
10	14	91	173	30.40	10.76	0.29	113	217	33.06	9.63	0.53
10	15	1810	3798	29.92	10.40	0.25	2118	4455	30.47	9.68	0.30
10	16	1294	2701	26.10	11.01	-0.09	1038	2128	27.49	10.18	0.03
10	17	290	612	20.05	9.09	-0.64	150	327	20.37	8.62	-0.61
10	18	46	96	16.55	8.94	-0.95	22	52	16.16	6.08	-0.98
10	19	6	13	18.01	9.55	-0.82	2	7	24.95	3.69	-0.20
10	20+	2	4	14.43	4.00	-1.14	1	5	12.50	0.00	-1.31
	Tot	3540	7400	27.52	11.00	0.04	3447	7194	29.09	10.12	0.18
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	44.50	0.00	1.56	1	1	38.50	0.00	1.02
11	15	73	136	33.68	10.43	0.59	111	215	33.19	10.40	0.54
11	16	1815	3826	32.51	9.98	0.48	2161	4471	32.09	9.54	0.45
11	17	1228	2595	29.17	10.62	0.18	971	2029	28.98	9.90	0.17
11	18	180	399	22.17	10.68	-0.44	100	209	22.48	9.19	-0.42
11	19	32	68	21.42	11.67	-0.51	12	24	16.06	6.22	-0.99
11	20+	13	26	23.40	9.55	-0.33	1	2	22.50	0.00	-0.42
	Tot	3342	7050	30.58	10.66	0.31	3357	6951	30.87	9.91	0.34
12	12	1	2	44.50	0.00	1.56	0	0			
12	13	0	0				1	2	34.50	0.00	0.66
12	14	0	0				1	2	36.50	0.00	0.84
12	15	2	3	32.25	4.84	0.46	5	8	39.43	6.50	1.10
12	16	88	174	35.20	9.55	0.72	116	223	33.60	8.73	0.58
12	17	1688	3512	34.75	9.32	0.68	1923	3881	34.19	8.95	0.63
12	18	868	1781	30.14	10.62	0.27	692	1386	31.83	10.02	0.42
12	19	136	284	24.51	9.90	-0.23	68	140	23.22	8.26	-0.35
12	20+	24	53	19.08	6.44	-0.72	9	22	17.90	6.57	-0.83
	Tot	2807	5810	32.71	10.23	0.50	2815	5665	33.26	9.43	0.55

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.) 51

Section L. R-260 Creativity

Gr.	Age	Boys					Girls				
		N'	N in 100's	M	σ	z	N'	N in 100's	M	σ	z
9	12	7	10	11.232	3.330	0.86	3	4	9.667	3.400	0.46
9	13	96	181	8.289	3.757	0.10	131	251	7.006	3.517	-0.23
9	14	1719	3608	8.076	3.711	0.05	2110	4424	7.434	3.402	-0.12
9	15	1323	2752	7.240	3.746	-0.17	1141	2313	6.704	3.321	-0.31
9	16	356	755	5.559	3.169	-0.60	177	382	4.774	2.713	-0.81
9	17	79	174	5.101	2.126	-0.72	36	86	4.075	2.040	-0.99
9	18	6	15	6.278	3.504	-0.42	6	15	5.520	1.955	-0.61
9	19	2	4	6.524	1.500	-0.35	1	2	7.000	.000	-0.23
9	20+	2	4	4.547	1.499	-0.87	0	0			
	Tot	3590	7505	7.450	3.742	-0.11	3605	7477	7.016	3.408	-0.23
10	12	0	0				0	0			
10	13	1	1	13.000	.000	1.32	3	4	5.000	2.160	-0.75
10	14	91	173	8.946	4.235	0.27	113	217	8.364	3.915	0.12
10	15	1810	3798	9.042	3.969	0.30	2118	4455	8.225	3.586	0.09
10	16	1294	2701	8.182	3.979	0.08	1038	2128	7.470	3.587	-0.11
10	17	290	612	6.345	3.404	-0.40	150	327	5.606	2.914	-0.59
10	18	46	96	5.933	3.072	-0.51	22	52	3.943	2.494	-1.02
10	19	6	13	5.098	3.973	-0.72	2	7	6.693	.462	-0.31
10	20+	2	4	5.472	1.500	-0.63	1	5	3.000	.000	-1.27
	Tot	3540	7400	8.454	4.011	0.15	3447	7194	7.849	3.628	-0.01
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	9.000	.000	0.29	1	1	13.000	.000	1.32
11	15	73	136	10.105	3.861	0.57	111	215	8.842	3.856	0.25
11	16	1815	3826	9.979	4.058	0.54	2161	4471	8.748	3.769	0.22
11	17	1228	2595	9.047	4.049	0.30	971	2029	7.939	3.643	0.01
11	18	180	399	6.819	4.006	-0.28	100	209	6.000	2.824	-0.49
11	19	32	68	6.211	4.058	-0.43	12	24	4.816	2.606	-0.80
11	20+	13	26	6.087	3.501	-0.47	1	2	8.000	.000	0.03
	Tot	3342	7050	9.409	4.138	0.39	3357	6951	8.419	3.755	0.14
12	12	1	2	15.000	.000	1.84	0	0			
12	13	0	0				1	2	11.000	.000	0.80
12	14	0	0				1	2	4.000	.000	-1.01
12	15	2	3	5.375	.484	-0.65	5	8	8.829	1.619	0.24
12	16	88	174	10.339	3.821	0.63	116	223	9.341	3.716	0.37
12	17	1688	3512	10.844	4.054	0.76	1923	3881	9.469	3.842	0.41
12	18	868	1781	9.352	4.132	0.38	692	1386	8.673	3.758	0.20
12	19	136	284	7.490	3.313	-0.10	68	140	6.628	3.596	-0.33
12	20+	24	53	6.363	3.509	-0.40	9	22	4.338	2.833	-0.92
	Tot	2807	5810	10.165	4.152	0.59	2815	5665	9.177	3.854	0.33

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.)

Section M. R-270 Mechanical Reasoning

Gr.	Age	Boys N'	N in 100's	M	σ	z	Girls N'	N in 100's	M	σ	z
9	12	7	10	11.017	3.295	0.28	3	4	7.000	1.414	-0.67
9	13	96	181	10.543	4.023	0.17	131	251	7.802	3.376	-0.48
9	14	1719	3608	11.722	3.859	0.44	2110	4424	8.055	3.299	-0.42
9	15	1323	2752	11.009	4.015	0.28	1141	2313	7.416	3.231	-0.57
9	16	356	755	9.570	3.934	-0.06	177	382	5.825	2.747	-0.95
9	17	79	174	8.327	3.557	-0.36	36	86	4.876	1.996	-1.17
9	18	6	15	10.478	5.315	0.15	6	15	5.512	1.598	-1.02
9	19	2	4	6.524	1.500	-0.78	1	2	3.000	.000	-1.61
9	20+	2	4	7.000	.000	-0.67	0	0			
	Tot	3590	7505	11.127	4.002	0.30	3605	7477	7.691	3.298	-0.51
10	12	0	0				0	0			
10	13	1	1	14.000	.000	0.98	3	4	6.000	1.633	-0.90
10	14	91	173	11.964	4.406	0.50	113	217	8.199	3.370	-0.39
10	15	1810	3798	12.433	4.092	0.61	2118	4455	8.423	3.479	-0.33
10	16	1294	2701	11.851	4.174	0.47	1038	2128	7.930	3.539	-0.45
10	17	290	612	10.186	4.049	0.08	150	327	5.882	2.836	-0.93
10	18	46	96	9.171	4.131	-0.16	22	52	5.936	2.479	-0.92
10	19	6	13	9.908	1.677	0.02	2	7	8.000	.000	-0.43
10	20+	2	4	7.565	3.499	-0.54	1	5	3.000	.000	-1.61
	Tot	3540	7400	11.974	4.184	0.50	3447	7194	8.132	3.508	-0.40
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	13.000	.000	0.75	1	1	6.000	.000	-0.90
11	15	73	136	11.975	4.061	0.50	111	215	8.799	3.663	-0.25
11	16	1815	3826	13.295	3.907	0.81	2161	4471	8.713	3.449	-0.27
11	17	1228	2595	12.557	4.069	0.64	971	2029	8.222	3.516	-0.38
11	18	180	399	10.810	4.216	0.23	100	209	6.265	2.963	-0.84
11	19	32	68	10.051	4.925	0.05	12	24	5.860	3.965	-0.94
11	20+	13	26	8.894	4.184	-0.22	1	2	7.000	.000	-0.67
	Tot	3342	7050	12.810	4.065	0.70	3357	6951	8.488	3.497	-0.32
12	12	1	2	14.000	.000	0.98	0	0			
12	13	0	0				1	2	16.000	.000	1.45
12	14	0	0				1	2	7.000	.000	-0.67
12	15	2	3	10.125	1.452	0.07	5	8	8.455	4.860	-0.33
12	16	88	174	13.318	3.548	0.82	116	223	9.054	3.521	-0.19
12	17	1688	3512	13.757	3.795	0.92	1923	3881	8.921	3.489	-0.22
12	18	868	1781	13.122	4.014	0.77	692	1386	8.390	3.625	-0.34
12	19	136	284	11.046	3.703	0.28	68	140	6.677	3.168	-0.75
12	20+	24	53	11.401	3.506	0.37	9	22	5.988	3.026	-0.91
	Tot	2807	5810	13.393	3.901	0.84	2815	5665	8.731	3.546	-0.26

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.) 53

Section N. R-282 Visualization in Three Dimensions

Gr.	Age	Boys N'	N in 100's	M	σ	z	Girls N'	N in 100's	M	σ	z
9	12	7	10	8.321	2.300	.09	3	4	6.333	2.055	-0.53
9	13	96	181	7.961	3.108	-0.02	131	251	7.022	2.928	-0.31
9	14	1719	3608	8.246	3.131	0.07	2110	4424	7.575	2.886	-0.14
9	15	1323	2752	7.874	3.254	-0.05	1141	2313	6.992	2.812	-0.32
9	16	356	755	7.048	3.166	-0.31	177	382	6.145	2.381	-0.59
9	17	79	174	6.313	3.195	-0.53	36	86	5.658	2.790	-0.74
9	18	6	15	7.255	2.317	-0.24	6	15	4.867	1.830	-0.98
9	19	2	4	5.048	3.000	-0.93	1	2	5.000	.000	-0.94
9	20+	2	4	4.484	.500	-1.10	0	0			
9	Tot	3590	7505	7.932	3.209	-0.03	3605	7477	7.274	2.870	-0.24
10	12	0	0				0	0			
10	13	1	1	12.000	.000	1.23	3	4	5.000	.816	-0.94
10	14	91	173	7.952	3.154	-0.02	113	217	8.000	2.931	-0.01
10	15	1810	3798	8.962	3.355	0.29	2118	4455	7.924	2.988	-0.03
10	16	1294	2701	8.562	3.406	0.16	1038	2128	7.676	3.040	-0.11
10	17	290	612	7.572	3.210	-0.14	150	327	6.014	2.835	-0.63
10	18	46	96	7.567	2.749	-0.14	22	52	4.514	1.685	-1.09
10	19	6	13	7.835	1.576	-0.06	2	7	6.533	2.305	-0.47
10	20+	2	4	6.056	3.000	-0.61	1	5	10.000	.000	0.61
10	Tot	3540	7400	8.656	3.375	0.19	3447	7194	7.740	3.026	-0.09
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	8.000	.000	-0.01	1	1	10.000	.000	0.61
11	15	73	136	8.902	3.207	0.27	111	215	7.752	3.052	-0.09
11	16	1815	3826	9.576	3.289	0.48	2161	4471	8.174	3.043	0.04
11	17	1228	2595	9.185	3.300	0.36	971	2029	7.843	2.981	-0.06
11	18	180	399	8.050	3.484	0.01	100	209	6.187	2.517	-0.57
11	19	32	68	7.429	3.586	-0.19	12	24	6.396	3.315	-0.51
11	20+	13	26	7.131	3.043	-0.28	1	2	7.000	.000	-0.32
11	Tot	3342	7050	9.303	3.334	0.40	3357	6951	7.999	3.034	-0.01
12	12	1	2	15.000	.000	2.17	0	0			
12	13	0	0				1	2	12.000	.000	1.23
12	14	0	0				1	2	9.000	.000	0.30
12	15	2	3	7.500	1.936	-0.17	5	8	8.803	2.453	0.24
12	16	88	174	9.639	3.208	0.50	116	223	8.399	3.113	0.11
12	17	1688	3512	9.931	3.367	0.59	1923	3881	8.497	3.073	0.14
12	18	868	1781	9.478	3.408	0.45	692	1386	8.196	3.094	0.05
12	19	136	284	8.541	3.284	0.16	68	140	6.976	3.044	-0.33
12	20+	24	53	8.814	2.758	0.24	9	22	5.861	2.353	-0.67
12	Tot	2807	5810	9.706	3.384	0.52	2815	5665	8.373	3.091	0.11

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.)

Section O. R-290 Abstract Reasoning

		Boys					Girls				
Gr.	Age	N'	N in 100's	M	σ	z	N'	N in 100's	M	σ	z
9	12	7	10	9.304	1.517	0.30	3	4	9.333	2.055	0.31
9	13	96	181	8.616	3.027	0.09	131	251	8.026	3.562	-0.10
9	14	1719	3608	8.585	2.958	0.08	2110	4424	8.413	2.976	0.02
9	15	1323	2752	7.791	3.126	-0.17	1141	2313	7.333	3.199	-0.32
9	16	356	755	6.356	3.234	-0.62	177	382	5.322	2.942	-0.95
9	17	79	174	4.906	2.347	-1.08	36	86	5.495	3.077	-0.89
9	18	6	15	5.798	2.325	-0.80	6	15	5.890	3.548	-0.77
9	19	2	4	3.000	.000	-1.68	1	2	9.000	.000	0.21
9	20+	2	4	2.031	1.000	-1.98	0	0			
	Tot	3590	7505	7.973	3.152	-0.11	3605	7477	7.870	3.175	-0.15
10	12	0	0				0	0			
10	13	1	1	12.000	.000	1.15	3	4	7.333	2.868	-0.32
10	14	91	173	8.712	2.878	0.12	113	217	8.669	3.024	0.11
10	15	1810	3798	9.013	2.952	0.21	2118	4455	8.707	2.928	0.12
10	16	1294	2701	8.244	3.162	-0.03	1038	2128	7.869	3.136	-0.15
10	17	290	612	6.949	2.981	-0.44	150	327	5.989	3.051	-0.74
10	18	46	96	5.761	2.887	-0.81	22	52	5.085	2.825	-1.02
10	19	6	13	7.227	2.053	-0.35	2	7	6.693	.462	-0.52
10	20+	2	4	6.546	2.500	-0.56	1	5	11.000	.000	0.84
	Tot	3540	7400	8.508	3.104	0.05	3447	7194	8.307	3.077	-0.01
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	9.000	.000	0.21	1	1	11.000	.000	0.84
11	15	73	136	9.196	3.058	0.27	111	215	9.211	2.783	0.28
11	16	1815	3826	9.547	2.858	0.38	2161	4471	9.018	2.955	0.21
11	17	1228	2595	8.969	3.061	0.20	971	2029	8.130	3.080	-0.06
11	18	180	399	7.450	3.338	-0.28	100	209	5.788	2.772	-0.80
11	19	32	68	6.304	3.524	-0.64	12	24	5.986	3.698	-0.74
11	20+	13	26	6.265	3.501	-0.65	1	2	5.000	.000	-1.05
	Tot	3342	7050	9.165	3.038	0.26	3357	6951	8.656	3.058	0.10
12	12	1	2	14.000	.000	1.78	0	0			
12	13	0	0				1	2	11.000	.000	0.84
12	14	0	0				1	2	11.000	.000	0.84
12	15	2	3	4.625	3.389	-1.17	5	8	10.559	2.061	0.70
12	16	88	174	9.734	2.815	0.44	116	223	9.432	2.962	0.35
12	17	1688	3512	9.887	2.747	0.49	1923	3881	9.292	2.763	0.30
12	18	868	1781	9.148	2.959	0.26	692	1386	8.572	3.190	0.07
12	19	136	284	7.495	3.000	-0.26	68	140	6.660	2.945	-0.53
12	20+	24	53	6.250	3.372	-0.66	9	22	5.060	2.161	-1.03
	Tot	2807	5810	9.504	2.912	0.37	2815	5665	9.043	2.935	0.22

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.) 55

Section P. R-311 Mathematics I.(Arithmetic Reasoning)

		Boys					Girls				
Gr.	Age	N'	N in 100's	M	σ	z	N'	N in 100's	M	σ	z
9	12	7	10	11.563	3.438	1.13	3	4	7.333	.943	-0.07
9	13	96	181	7.911	3.404	0.09	131	251	6.904	3.577	-0.19
9	14	1719	3608	8.033	3.379	0.13	2110	4424	7.456	3.181	-0.04
9	15	1323	2752	6.983	3.380	-0.17	1141	2313	6.505	3.190	-0.31
9	16	356	755	5.396	2.702	-0.62	177	382	4.795	2.478	-0.80
9	17	79	174	4.401	1.998	-0.91	36	86	4.771	2.489	-0.80
9	18	6	15	5.606	.885	-0.56	6	15	4.891	.946	-0.77
9	19	2	4	3.032	2.000	-1.30	1	2	2.000	.000	-1.59
9	20+	2	4	3.421	2.499	-1.19	0	0			
	Tot	3590	7505	7.290	3.424	-0.08	3605	7477	6.970	3.236	-0.18
10	12	0	0				0	0			
10	13	1	1	13.000	.000	1.54	3	4	4.333	.943	-0.93
10	14	91	173	8.704	3.716	0.32	113	217	8.336	3.873	0.21
10	15	1810	3798	8.780	3.364	0.34	2118	4455	7.997	3.390	0.12
10	16	1294	2701	7.766	3.397	0.05	1038	2128	7.185	3.341	-0.11
10	17	290	612	6.170	2.874	-0.40	150	327	5.331	2.574	-0.64
10	18	46	96	5.219	2.872	-0.68	22	52	4.592	1.814	-0.85
10	19	6	13	7.027	3.095	-0.16	2	7	5.693	.462	-0.54
10	20+	2	4	5.509	.500	-0.59	1	5	8.000	.000	0.12
	Tot	3540	7400	8.141	3.444	0.16	3447	7194	7.617	3.416	0.01
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	15.000	.000	2.11	1	1	11.000	.000	0.97
11	15	73	136	9.326	3.723	0.50	111	215	8.482	3.917	0.26
11	16	1815	3826	9.622	3.462	0.58	2161	4471	8.326	3.467	0.21
11	17	1228	2595	8.717	3.383	0.32	971	2029	7.494	3.424	-0.03
11	18	180	399	6.565	3.057	-0.29	100	209	5.487	2.913	-0.60
11	19	32	68	6.085	3.820	-0.43	12	24	3.983	2.235	-1.03
11	20+	13	26	5.930	2.901	-0.47	1	2	4.000	.000	-1.02
	Tot	3342	7050	9.063	3.518	0.42	3357	6951	7.987	3.508	0.11
12	12	1	2	14.000	.000	1.83	0	0			
12	13	0	0				1	2	7.000	.000	-0.17
12	14	0	0				1	2	6.000	.000	-0.45
12	15	2	3	7.875	2.421	0.08	5	8	11.341	2.205	1.07
12	16	88	174	10.311	3.577	0.78	116	223	8.668	3.692	0.31
12	17	1688	3512	10.400	3.462	0.80	1923	3881	9.071	3.502	0.42
12	18	868	1781	9.277	3.456	0.48	692	1386	7.976	3.678	0.11
12	19	136	284	6.752	3.262	-0.24	68	140	5.851	2.774	-0.49
12	20+	24	53	5.614	2.583	-0.56	9	22	5.452	2.397	-0.61
	Tot	2807	5810	9.831	3.579	0.64	2815	5665	8.695	3.598	0.32

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.)

Section Q. R-312 Mathematics II (Introd.high school math)

Gr.	Age	Boys N'	N in 100's	M	σ	z	Girls N'	N in 100's	M	σ	z
9	12	7	10	11.294	3.916	0.36	3	4	9.333	1.886	-0.08
9	13	96	181	10.524	4.053	0.19	131	251	9.607	4.241	-0.02
9	14	1719	3608	10.151	4.124	0.10	2110	4424	9.923	3.746	0.05
9	15	1323	2752	8.839	3.934	-0.19	1141	2313	8.744	3.768	-0.22
9	16	356	755	6.395	2.961	-0.75	177	382	6.441	2.931	-0.74
9	17	79	174	5.883	2.524	-0.86	36	86	5.676	2.407	-0.91
9	18	6	15	5.087	2.213	-1.04	6	15	4.723	1.551	-1.13
9	19	2	4	3.524	1.500	-1.40	1	2	9.000	.000	-0.16
9	20+	2	4	2.453	1.499	-1.64	0	0			
	Tot	3590	7505	9.185	4.119	-0.12	3605	7477	9.310	3.841	-0.09
10	12	0	0				0	0			
10	13	1	1	14.000	.000	0.98	3	4	7.667	2.625	-0.46
10	14	91	173	11.969	5.240	0.52	113	217	11.049	4.183	0.31
10	15	1810	3798	11.269	4.590	0.36	2118	4455	10.402	4.177	0.16
10	16	1294	2701	9.619	4.447	-0.02	1038	2128	9.284	4.047	-0.09
10	17	290	612	7.379	3.175	-0.53	150	327	7.240	2.775	-0.56
10	18	46	96	6.492	3.020	-0.73	22	52	6.544	1.888	-0.71
10	19	6	13	8.542	2.944	-0.26	2	7	9.307	.461	-0.09
10	20+	2	4	8.528	1.500	-0.26	1	5	10.000	.000	0.07
	Tot	3540	7400	10.293	4.611	0.14	3447	7194	9.917	4.156	0.05
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	20.000	.000	2.34	1	1	12.000	.000	0.52
11	15	73	136	13.424	5.789	0.85	111	215	11.456	4.895	0.40
11	16	1815	3826	12.430	5.407	0.62	2161	4471	10.380	4.628	0.16
11	17	1228	2595	10.759	5.057	0.24	971	2029	9.343	4.368	-0.08
11	18	180	399	7.591	3.903	-0.48	100	209	6.913	2.712	-0.63
11	19	32	68	7.710	4.398	-0.45	12	24	6.731	1.924	-0.67
11	20+	13	26	6.274	3.743	-0.78	1	2	9.000	.000	-0.16
	Tot	3342	7050	11.494	5.374	0.41	3357	6951	9.993	4.575	0.07
12	12	1	2	22.000	.000	2.79	0	0			
12	13	0	0				1	2	6.000	.000	-0.84
12	14	0	0				1	2	8.000	.000	-0.38
12	15	2	3	10.500	5.809	0.18	5	8	13.280	3.427	0.81
12	16	88	174	14.222	5.773	1.03	116	223	10.454	5.364	0.17
12	17	1688	3512	13.090	5.691	0.77	1923	3881	10.487	4.745	0.18
12	18	868	1781	11.169	5.232	0.33	692	1386	9.390	4.615	-0.07
12	19	136	284	8.314	4.025	-0.31	68	140	7.826	3.286	-0.42
12	20+	24	53	6.707	2.992	-0.68	9	22	6.411	1.547	-0.74
	Tot	2807	5810	12.245	5.643	0.58	2815	5665	10.137	4.743	0.10

Note: For explanation of notation, see first page of Table IV.

Table IV-4 (cont.)

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Section R. F-410 Arithmetic Computation

Gr.	Age	Boys					Girls				
		N'	N in 100's	M	σ	z	N'	N in 100's	M	σ	z
9	12	7	10	26.60	11.50	0.09	3	4	25.00	14.14	0.03
9	13	96	181	17.60	35.80	-0.28	131	251	22.86	30.23	-0.06
9	14	1719	3608	23.53	23.99	-0.04	2110	4424	28.75	20.67	0.18
9	15	1323	2752	18.50	29.30	-0.24	1141	2313	23.57	23.42	-0.03
9	16	356	755	7.88	31.66	-0.68	177	382	10.30	30.46	-0.58
9	17	79	174	3.18	31.66	-0.87	36	86	3.64	31.18	-0.85
9	18	6	15	- 4.87	41.09	-1.20	6	15	4.42	44.20	-0.82
9	19	2	4	- 10.24	15.00	-1.42	1	2	20.00	0.00	-0.18
9	20+	2	4	- 51.32	37.48	-3.11	0	0			
	Tot	3590	7505	19.38	28.00	-0.21	3605	7477	25.66	23.27	0.05
10	12	0	0				0	0			
10	13	1	1	30.00	0.00	0.23	3	4	28.34	6.24	0.16
10	14	91	173	26.13	18.16	0.07	113	217	31.48	15.24	0.29
10	15	1810	3798	27.36	21.32	0.12	2118	4455	31.02	17.74	0.27
10	16	1294	2701	21.69	23.74	-0.11	1038	2128	26.22	21.10	0.08
10	17	290	612	9.46	30.58	-0.61	150	327	15.20	23.56	-0.38
10	18	46	96	5.59	31.04	-0.77	22	52	12.04	30.35	-0.51
10	19	6	13	25.77	9.48	0.06	2	7	31.54	2.31	0.29
10	20+	2	4	15.10	5.00	-0.38	1	5	35.00	0.00	0.44
	Tot	3540	7400	23.49	23.80	-0.04	3447	7194	28.76	19.52	0.18
11	12	0	0				0	0			
11	13	0	0				0	0			
11	14	1	1	30.00	0.00	0.23	1	1	35.00	0.00	0.44
11	15	73	136	30.62	20.78	0.26	111	215	29.50	18.11	0.21
11	16	1815	3826	31.20	19.56	0.28	2161	4471	32.99	17.40	0.35
11	17	1228	2595	26.84	21.72	0.10	971	2029	29.44	18.22	0.21
11	18	180	399	18.15	24.21	-0.26	100	209	18.68	24.38	-0.23
11	19	32	68	11.41	27.27	-0.53	12	24	1.82	25.43	-0.93
11	20+	13	26	10.34	33.20	-0.58	1	2	40.00	0.00	0.64
	Tot	3342	7050	28.58	21.20	0.17	3357	6951	31.31	18.24	0.28
12	12	1	2	65.00	0.00	1.67	0	0			
12	13	0	0				1	2	*	*	*
12	14	0	0				1	2	15.00	0.00	-0.39
12	15	2	3	23.12	16.94	-0.05	5	8	41.35	13.82	0.70
12	16	88	174	34.26	17.88	0.41	116	223	34.64	17.08	0.42
12	17	1688	3512	34.92	17.78	0.43	1923	3881	35.38	16.72	0.45
12	18	868	1781	28.24	22.59	0.16	692	1386	31.54	19.33	0.29
12	19	136	284	20.06	21.09	-0.18	68	140	18.58	24.71	-0.24
12	20+	24	53	12.54	12.10	-0.49	9	22	19.08	13.34	-0.22
	Tot	2807	5810	31.93	20.02	0.31	2815	5665	33.92	17.90	0.39

Note: For explanation of notation, see first page of Table IV.
*Data not available.

Fig. IV-1 Relationship of TALENT scores to Age and Grade
R102.Vocabulary (Information I)

*Standard scores are based
on 15-year-old population

KEY

GRADE

△——12
⊙——11
⊡——10
▷——9

——Grade
mean
......Standard
group

GIRLS

BOYS

Mean Standard Score*

1.5 1.0 .5 0 -.5 -1.0 -1.5

13 14 15 16 17 18 19 20 Age

13 14 15 16 17 18 19 20 Age
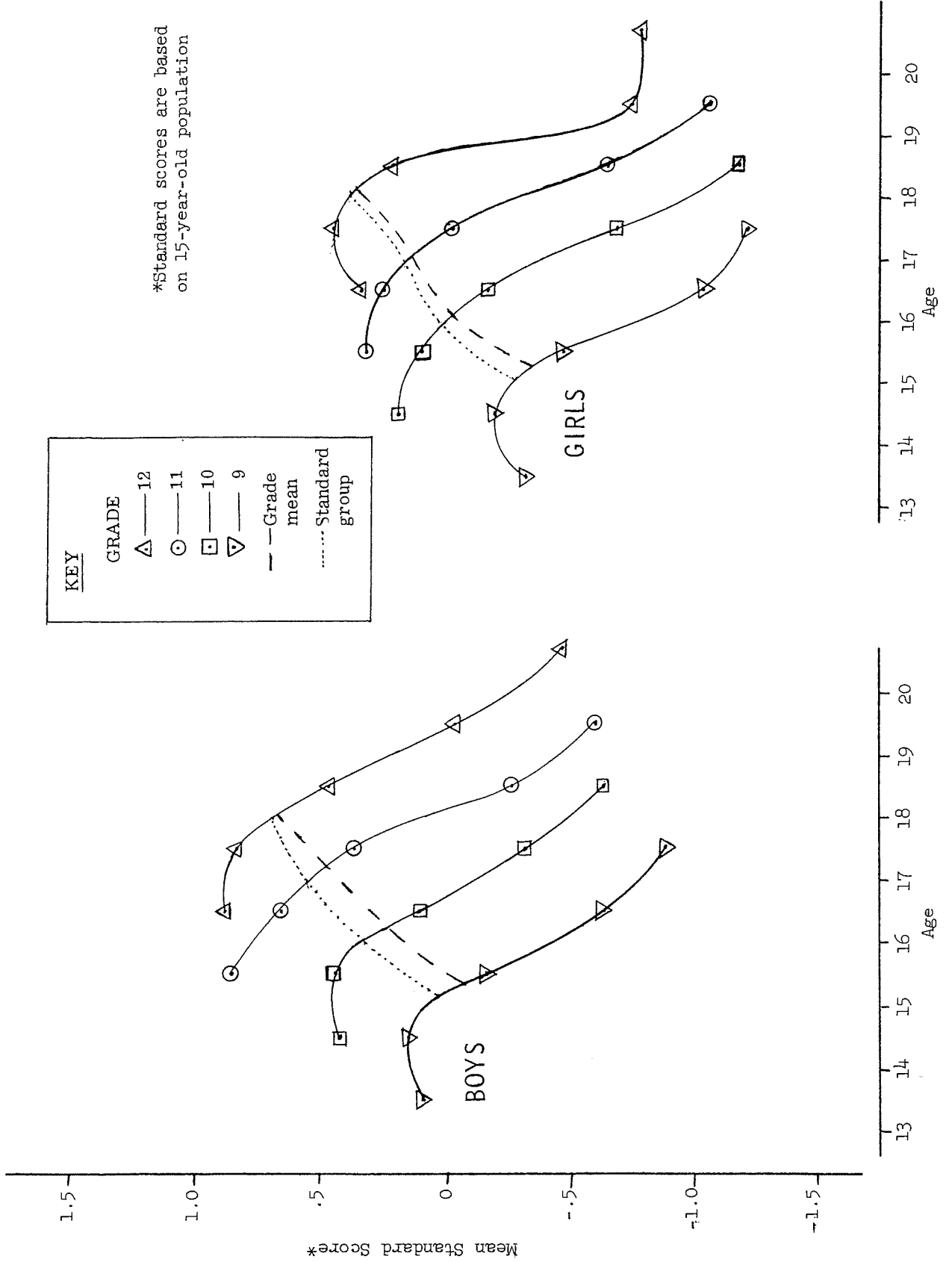
Fig. IV-2 Relationship of TALENT scores to Age and Grade
R107, Physical Science Information

*Standard scores are based
on 15-year-old population

KEY

GRADE
△ — 12
⊙ — 11
□ — 10
▽ — 9
— — Grade mean
······ Standard group

GIRLS

BOYS

Mean Standard Score*

Age
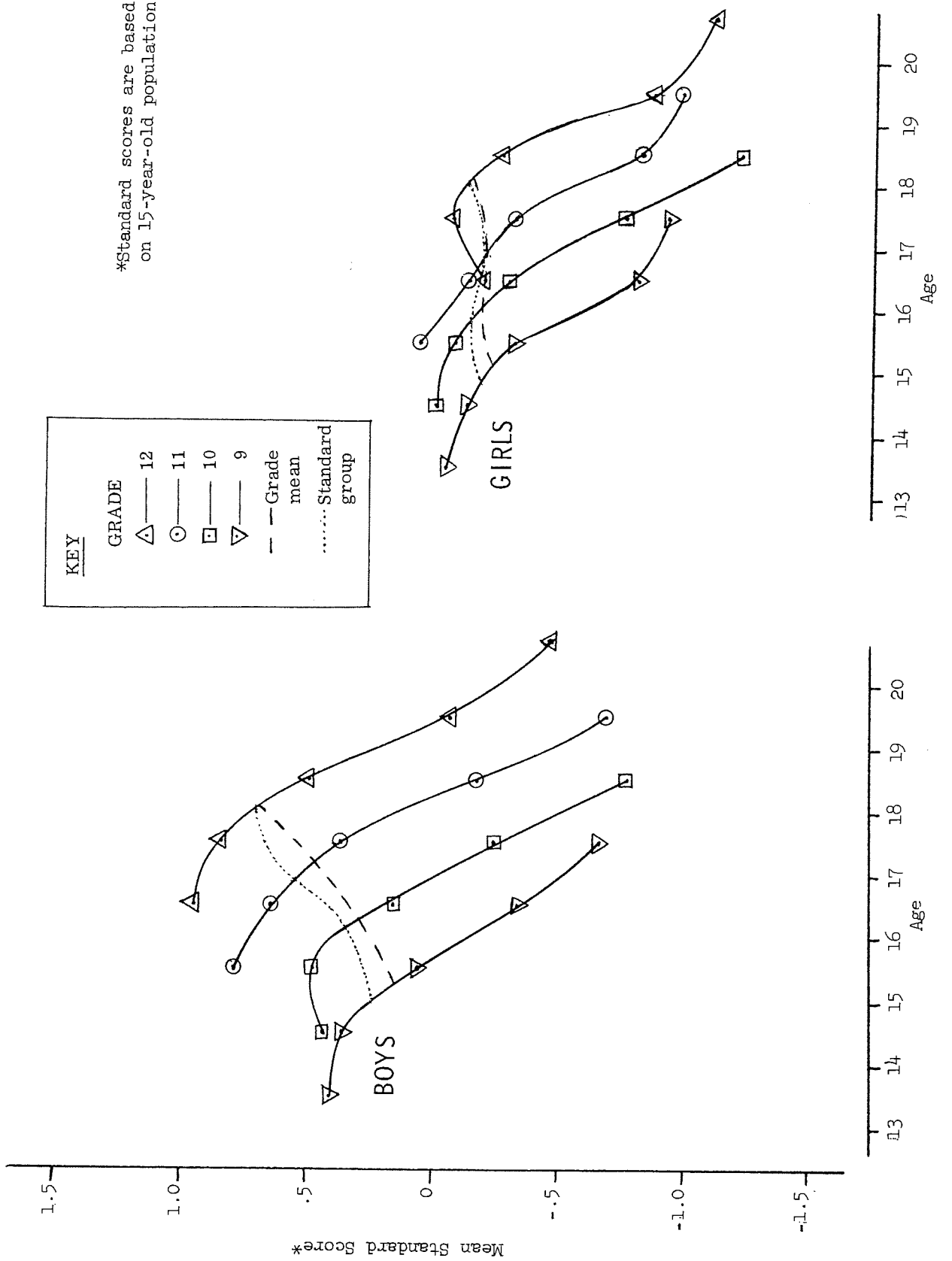
Fig. IV-3   Relationship of TALENT scores to Age and Grade
RIII, Electricity and Electronics Information

*Standard scores are based
on 15-year-old population
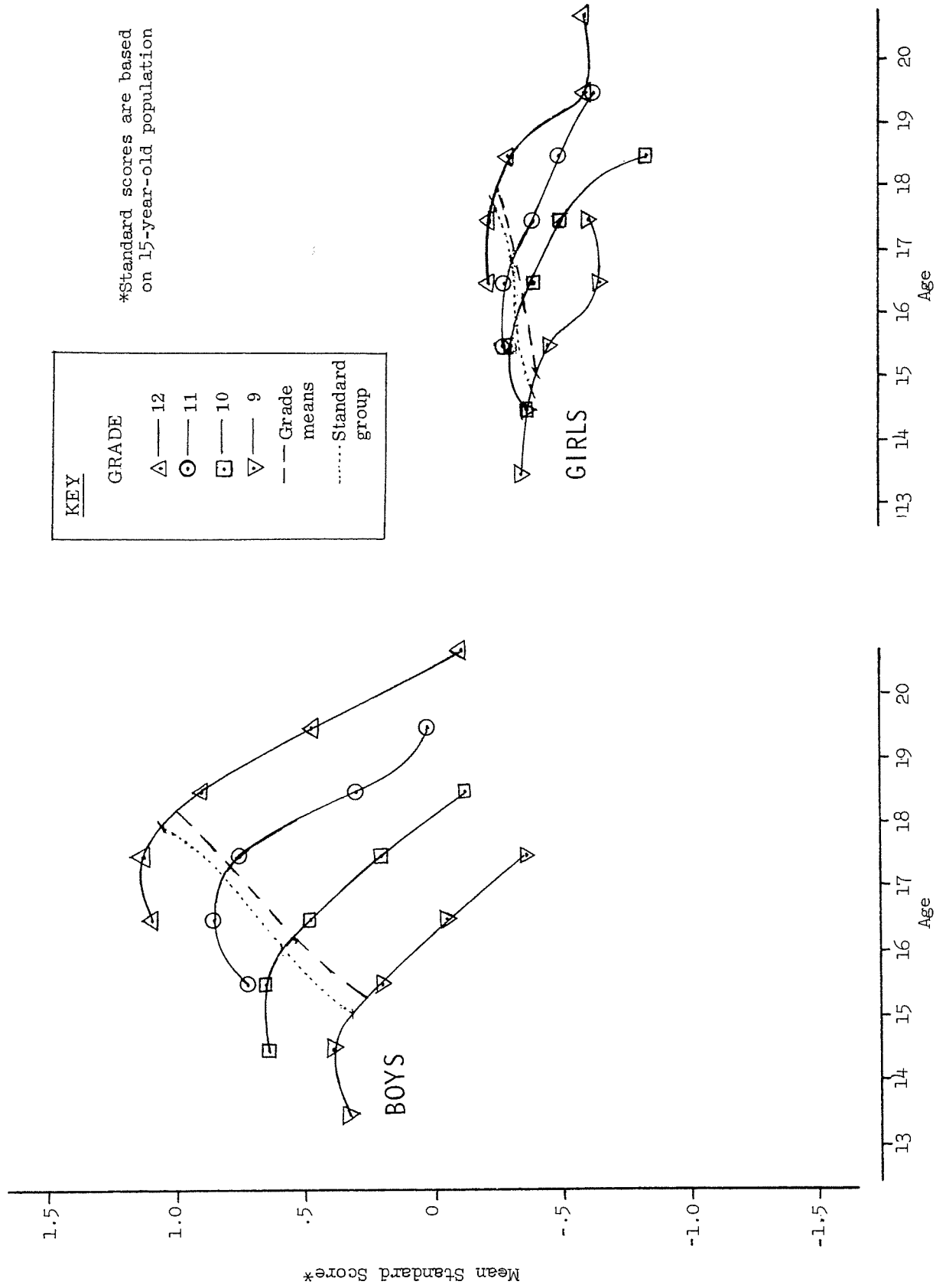
Fig. IV-4 Relationship of TALENT scores to Age and Grade
R-112.Mechanical Information

*Standard scores are based
on 15-year-old population

KEY

GRADE
△——12
⊙——11
⊡——10
▽——9

— — Grade mean
······ Standard group

GIRLS

BOYS

Age

Age

Mean Standard Score*
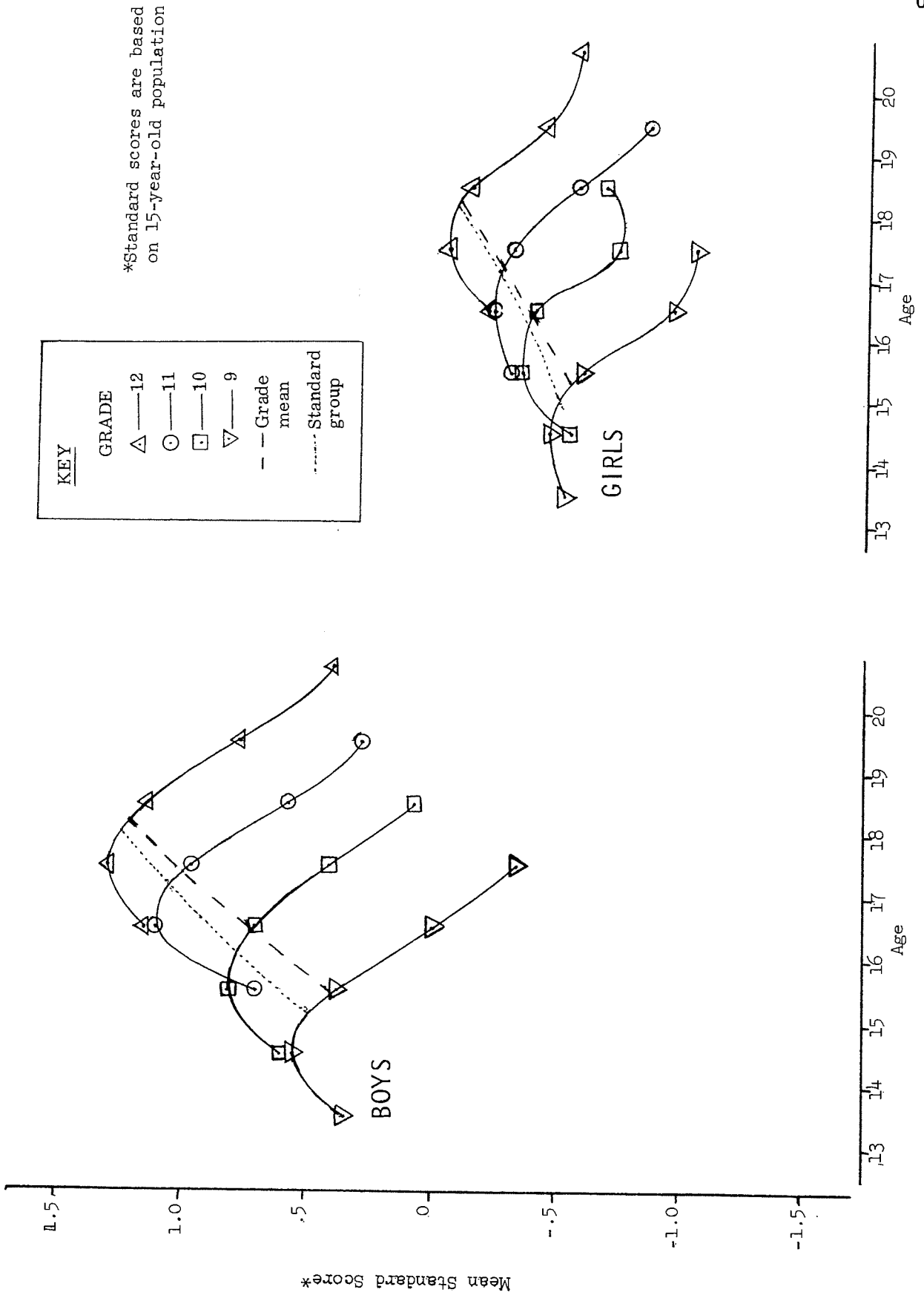
Fig. IV-5 Relationship of TALENT scores to Age and Grade
R-190. Information Part I Total

*Standard scores are based
on 15-year-old population

KEY

GRADE

△——— 12
⊙——— 11
⊡——— 10
▽——— 9

——— Grade mean
········· Standard group

GIRLS

BOYS

Age

Mean Standard Score*
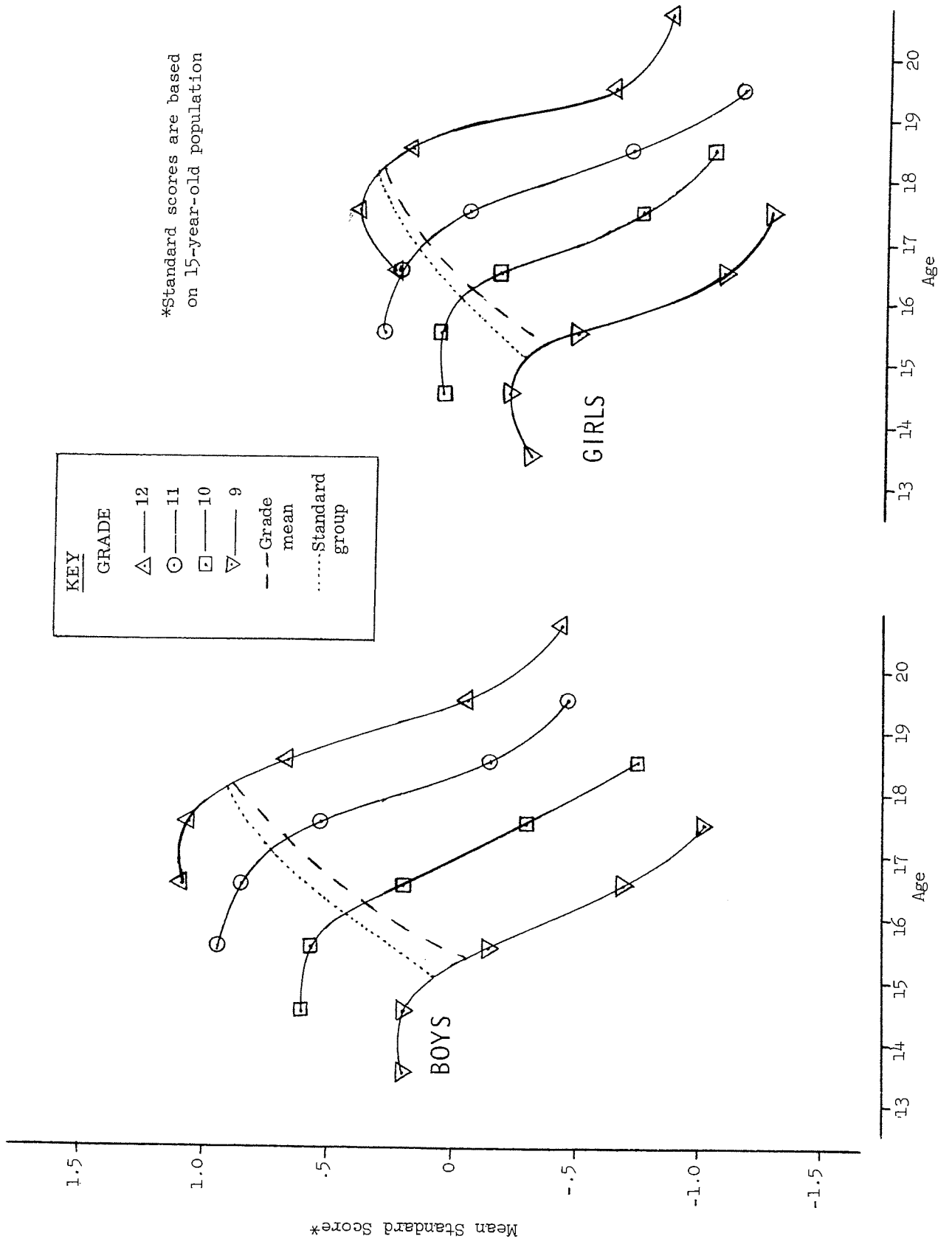
Fig. IV-6 Relationship of TALENT scores to Age and Grade
R-230.English Total

*Standard scores are based
on 15-year-old population

KEY

GRADE

△——12
⊙——11
□——10
▽——9
— ·— Grade mean
········Standard group

GIRLS

BOYS

Mean Standard Score*

1.5
1.0
.5
0
-.5
-1.0
-1.5

13 14 15 16 17 18 19 20+
Age

13 14 15 16 17 18 19 20+
Age
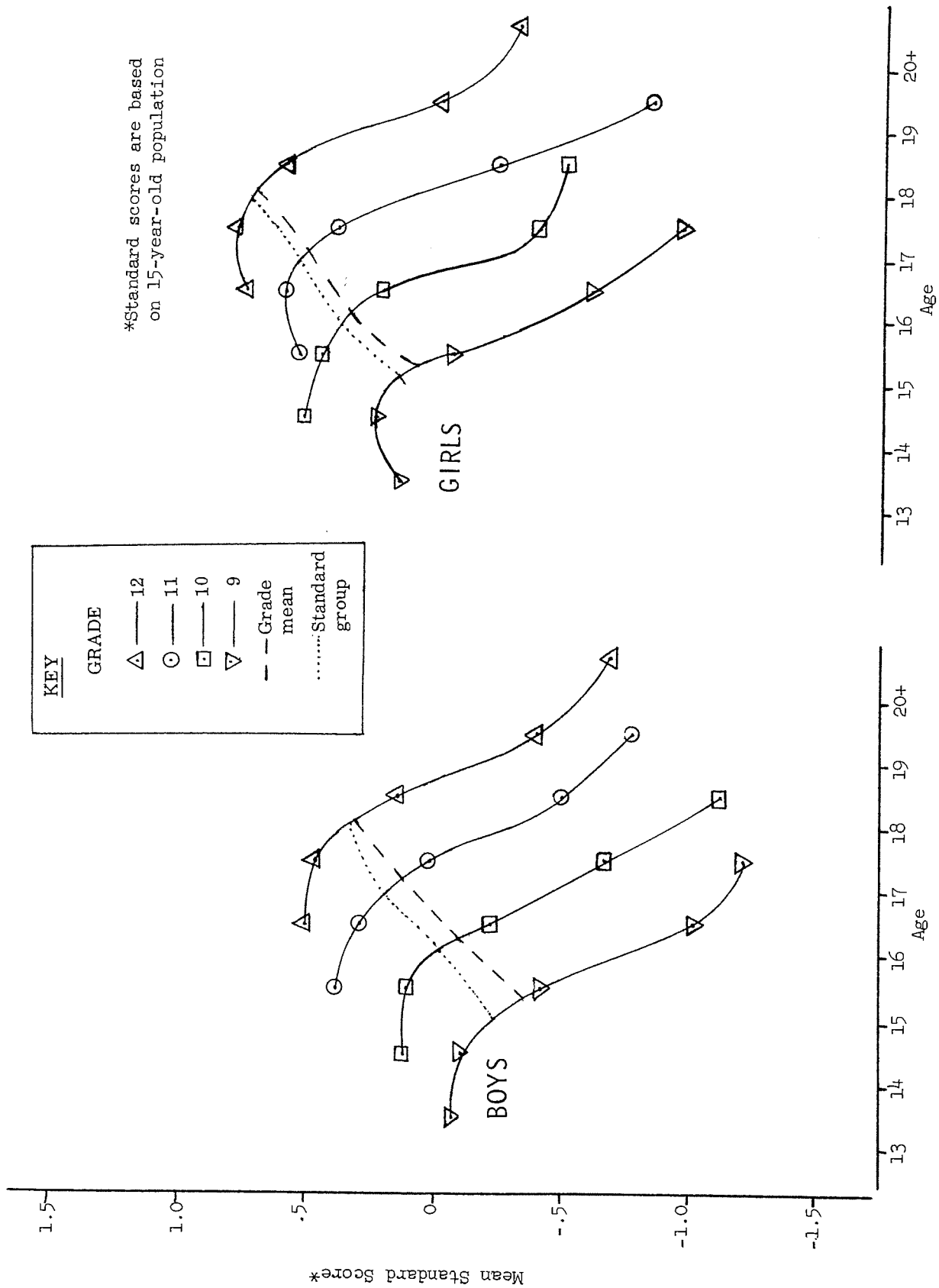
Fig. IV-7 Relationship of TALENT scores to Age and Grade
R-250. Reading Comprehension

*Standard scores are based
on 15-year-old population
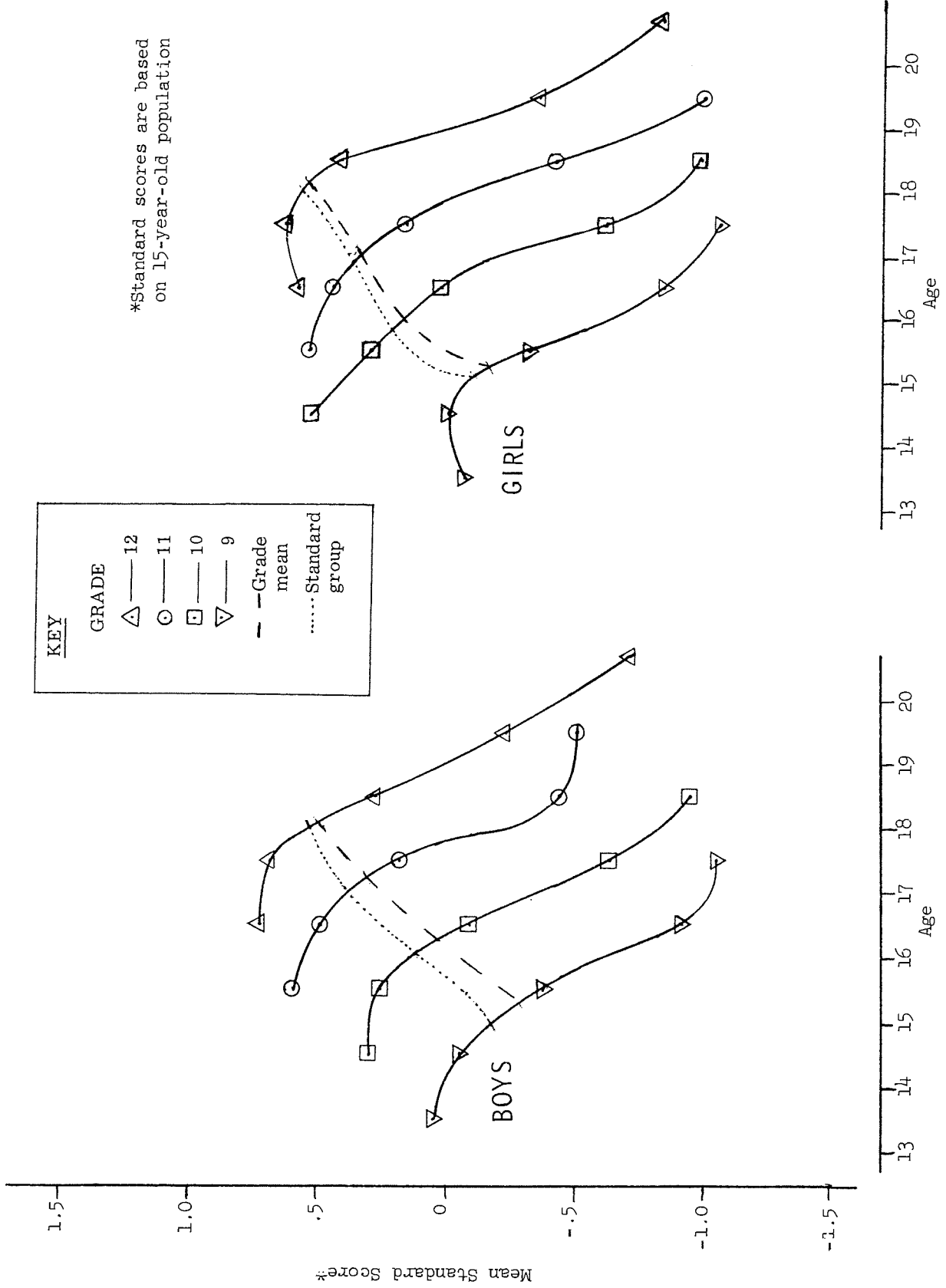
Fig. IV-8   Relationship of TALENT scores to Age and Grade
R-260.Creativity

*Standard scores are based
on 15-year-old population

KEY

GRADE

△ ——— 12
⊙ ——— 11
□ ——— 10
▽ ——— 9

— — Grade means
.... Standard group

GIRLS

BOYS

Age

Mean Standard Score*
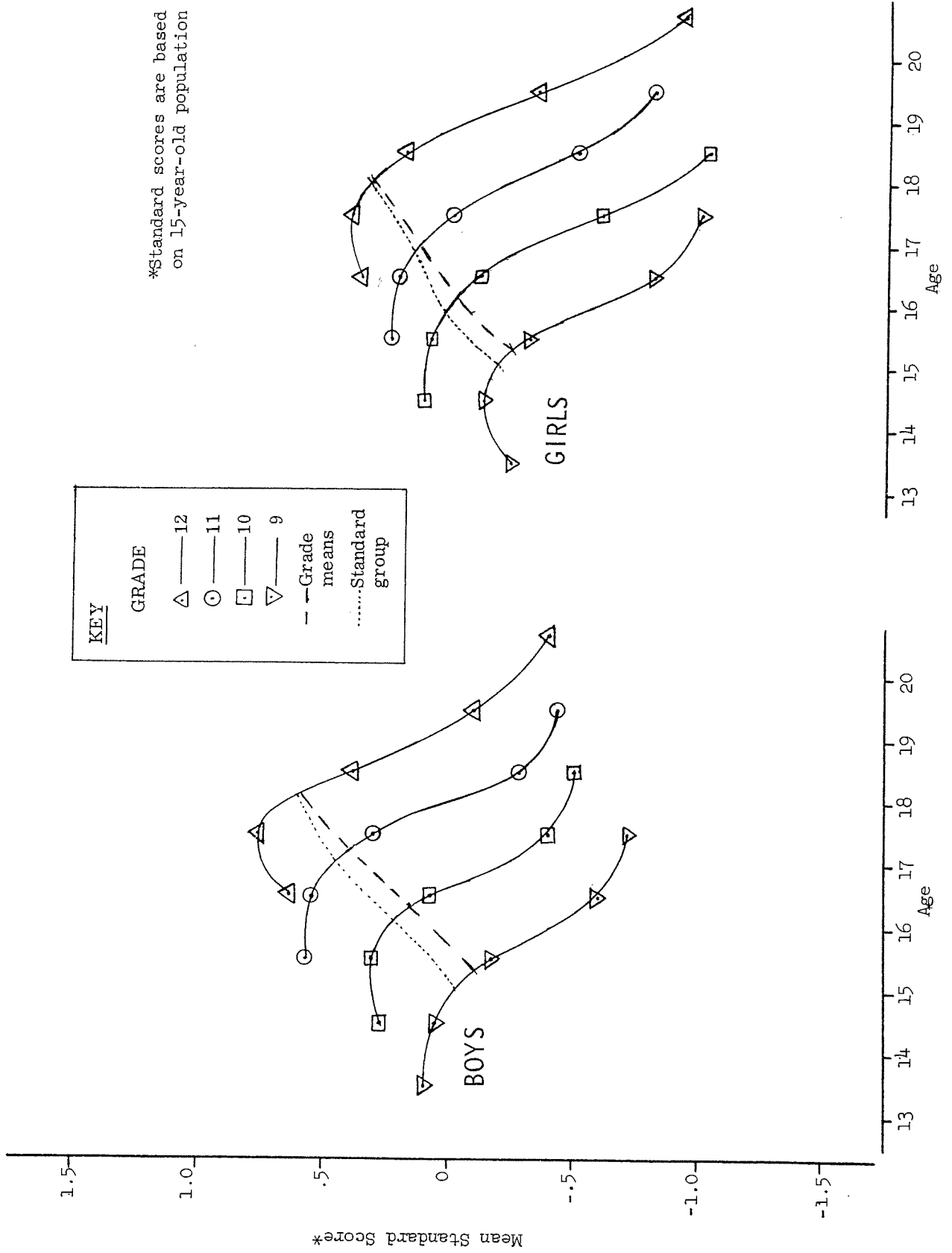
Fig. IV-9 Relationship of TALENT scores to Age and Grade
R-282.Visualization in Three Dimensions

*Standard scores are based
on 15-year-old population
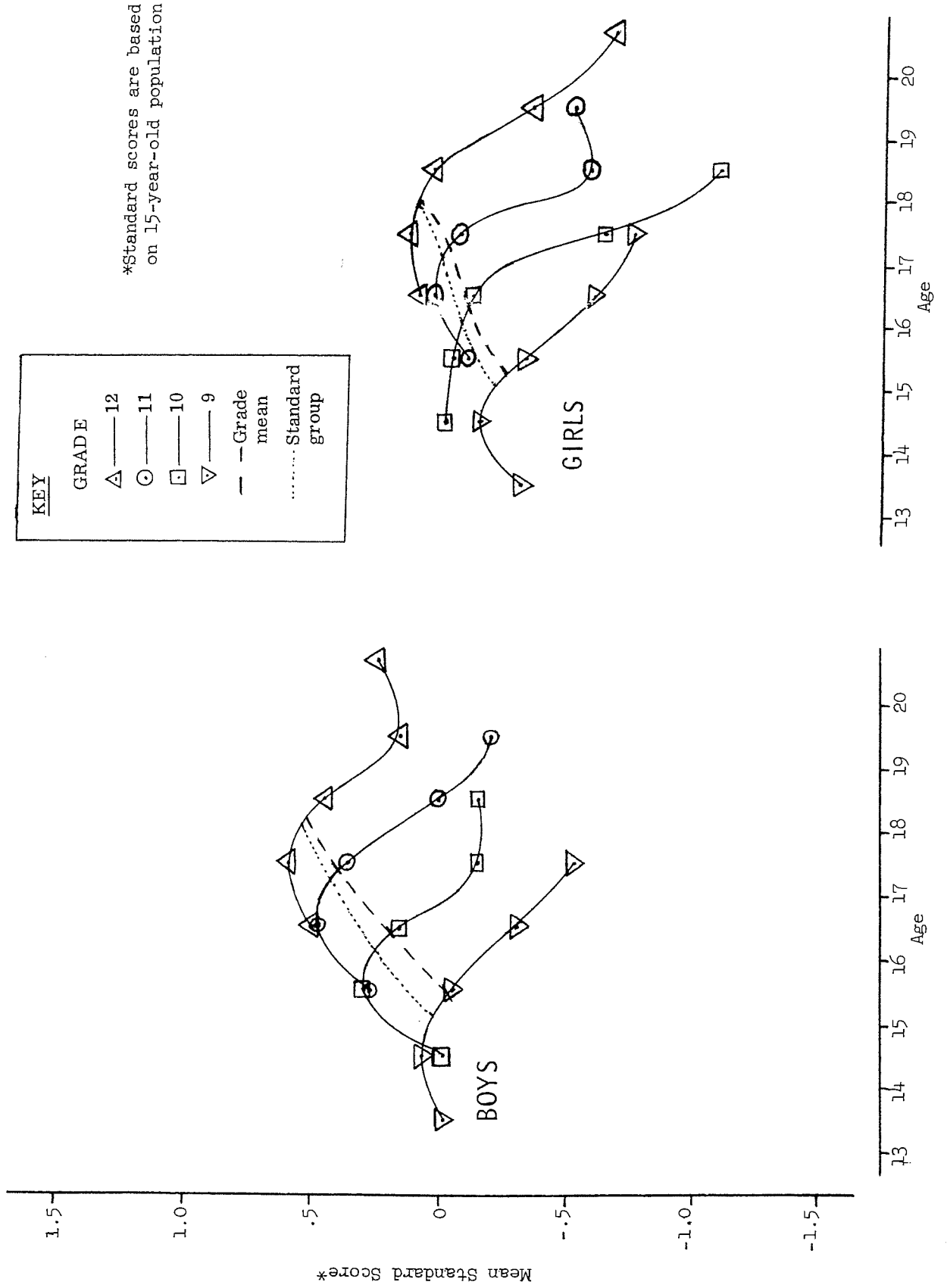
Fig. IV-10 Relationship of TALENT scores to Age and Grade
R-290 Abstract Reasoning

*Standard scores are based
on 15-year-old population
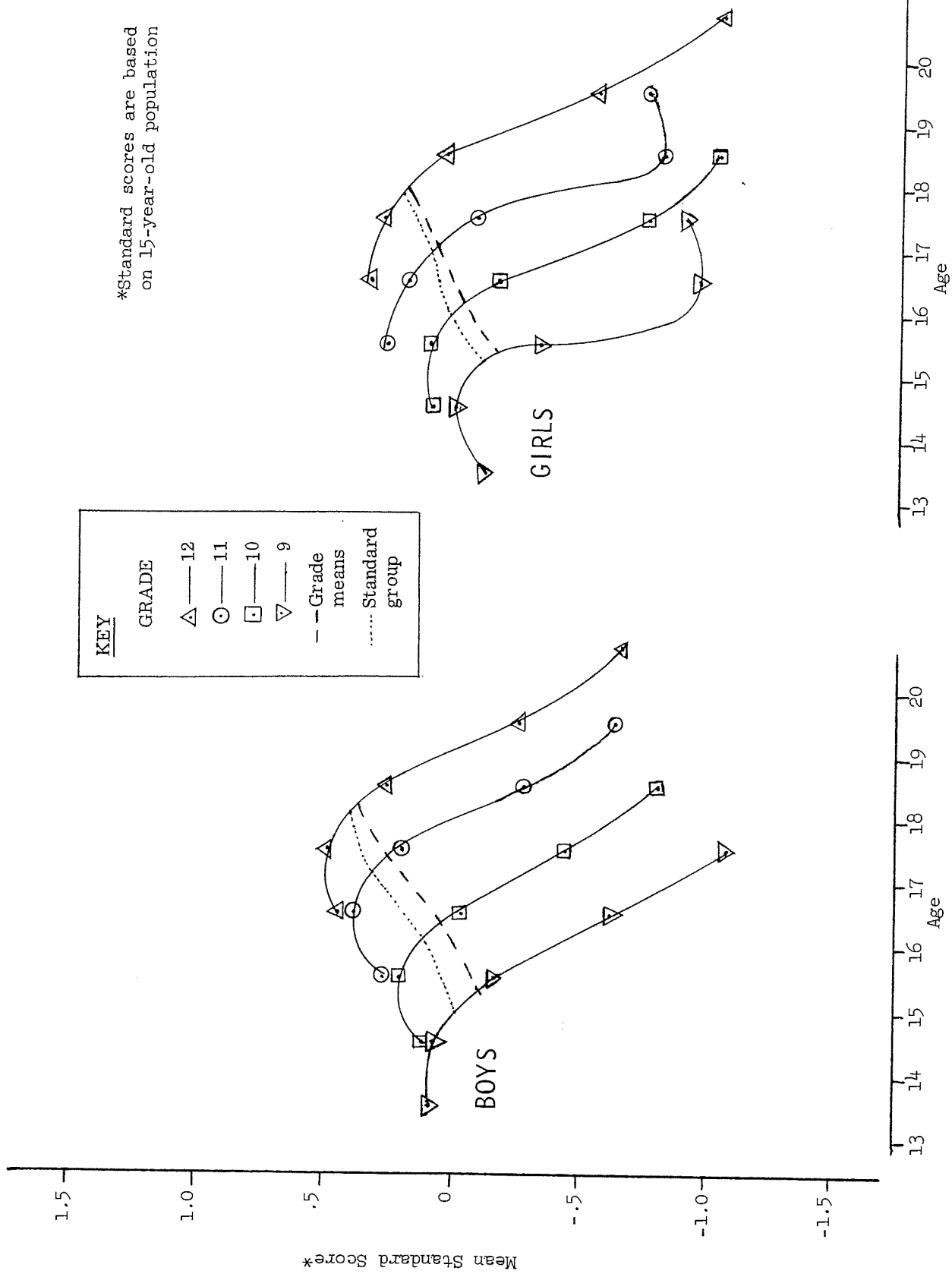
Fig. IV-11 Relationship of TALENT scores to Age and Grade
R-311,Mathematics Part I. Arithmetic Reas.

*Standard scores are based
on 15-year-old population

KEY

GRADE

△ ——— 12
⊙ ——— 11
▣ ——— 10
▽ ——— 9

—— Grade
means

...... Standard
group

GIRLS

BOYS

Age

Age

Mean Standard Score*

1.5   1.0   .5   0   -.5   -1.0   -1.5

13 14 15 16 17 18 19 20
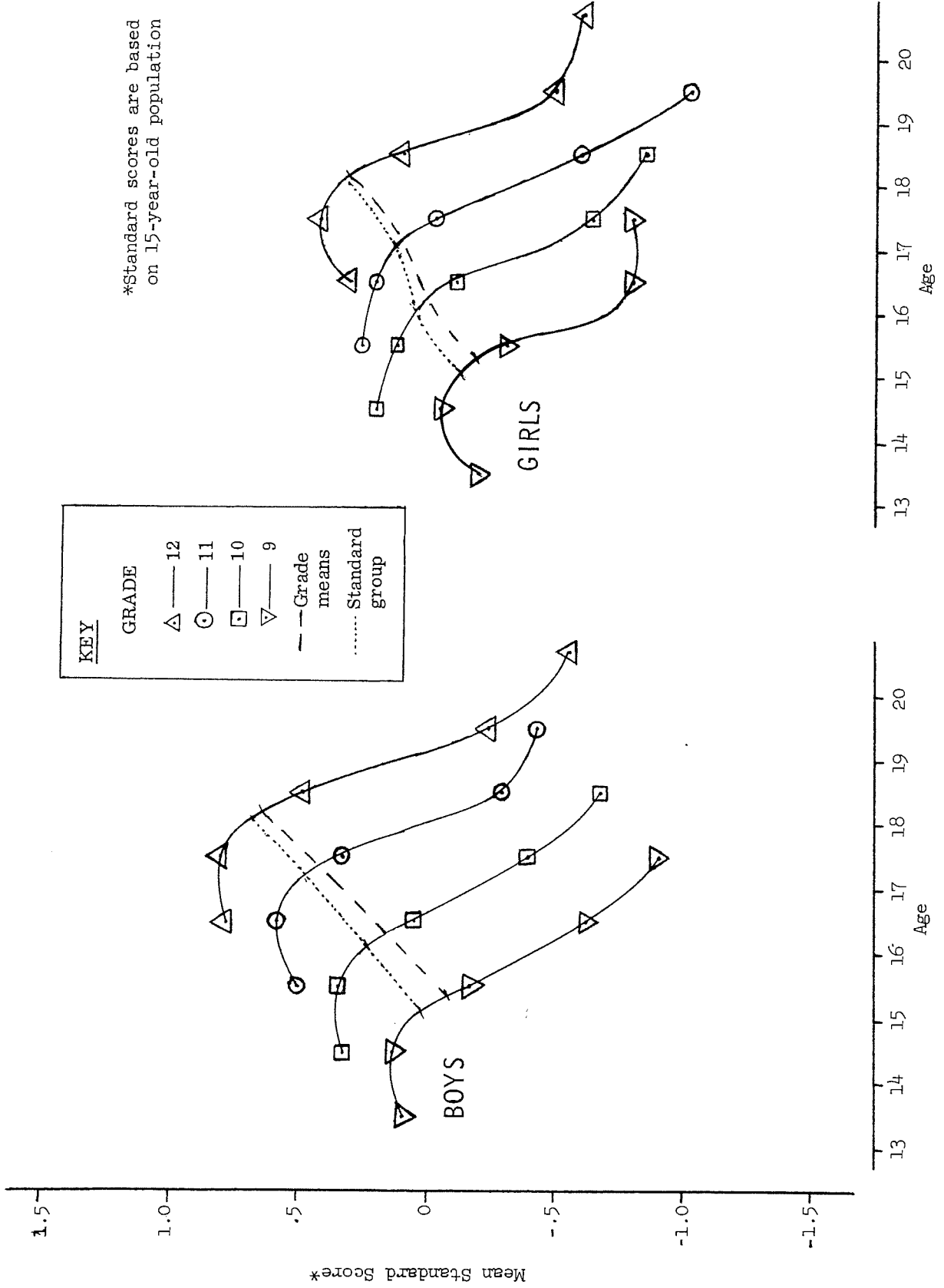
Fig. IV-12 Relationship of TALENT scores to Age and Grade
R-312,Mathematics Part II. Introductory high school mathematics

*Standard scores are based
on 15-year-old population
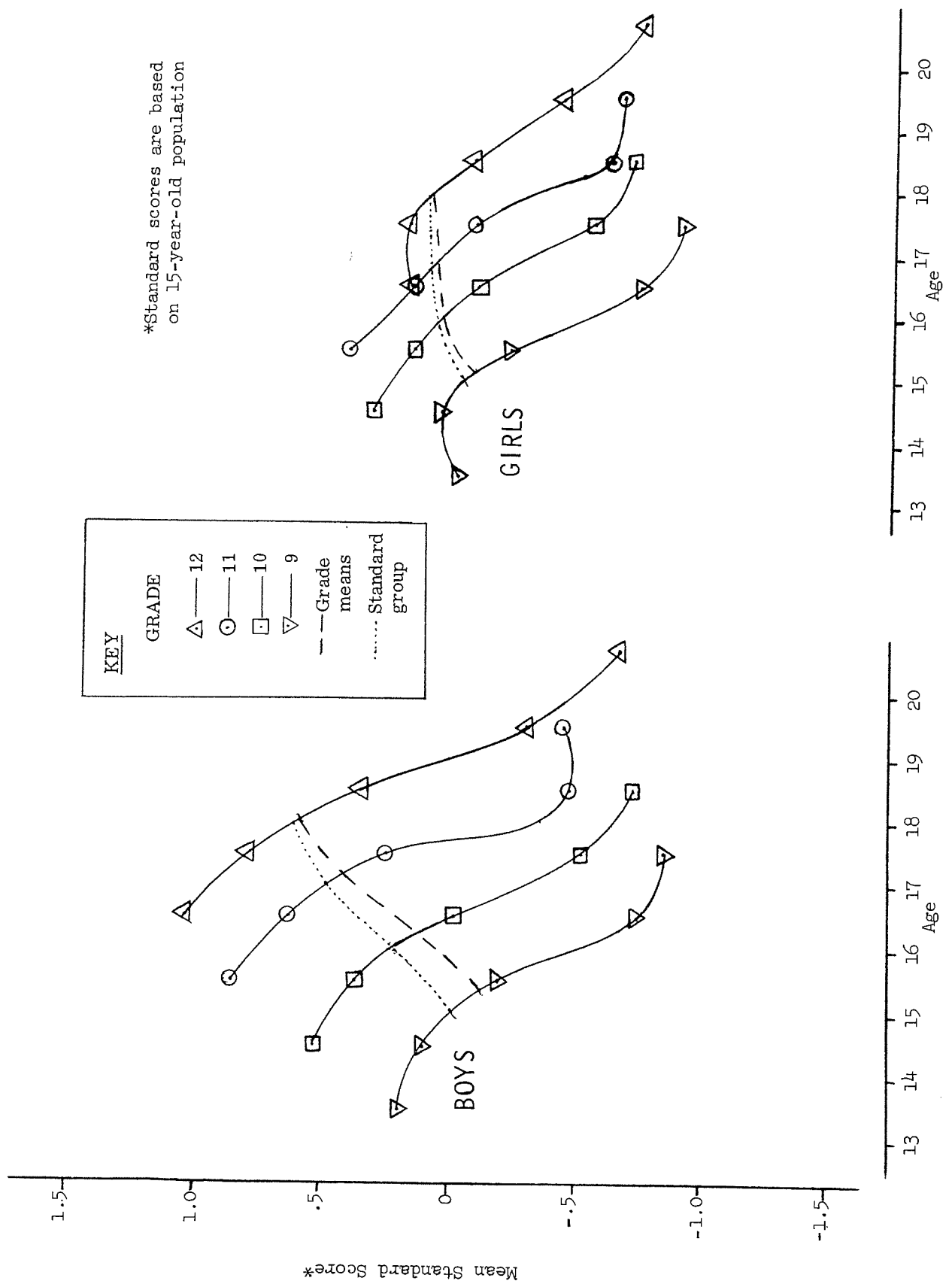
Table IV-5. Estimated* means and standard deviations for total population of 15-year-old boys and girls on 18 selected Project TALENT tests

Weighted numbers of cases (approx.)
Boys : N =   787,600
Girls : N =   832,100
Total : N =1,619,700

Test	Boys		Girls		Total	
	M	σ	M	σ	M	σ
R-102 Vocabulary Info. Part I	11.68	4.27	10.61	4.17	11.13	4.25
R-105 Social Studies Info.	13.69	5.74	11.99	5.12	12.82	5.50
R-107 Physical Science Info.	8.78	3.98	6.86	3.52	7.79	3.87
R-108 Biological Science Info.	5.91	2.52	5.19	2.35	5.54	2.46
R-111 Elec. Information	8.30	4.17	5.22	2.53	6.72	3.75
R-112 Mech. Information	10.95	3.72	7.10	2.90	8.97	3.84
R-114 Home Economics Info.	7.67	2.98	11.64	3.54	9.71	3.83
R-115 Sports Information	7.33	3.15	5.12	2.44	6.19	3.02
R-190 Information Part I Total	127.05	39.78	113.89	33.40	120.29	37.22
R-230 English Total	74.06	15.98	81.08	14.29	77.66	15.54
R-250 Reading Comprehension	26.26	11.53	27.95	10.69	27.13	11.14
R-260 Creativity	8.15	4.04	7.65	3.67	7.89	3.87
R-270 Mechanical Reasoning	11.64	4.22	8.13	3.50	9.84	4.24
R-282 Visualization in 3 Dim.	8.46	3.38	7.63	3.00	8.03	3.22
R-290 Abstract Reasoning	8.40	3.21	8.28	3.14	8.34	3.18
R-311 Math. I. Arithmetic Reas.	7.78	3.56	7.40	3.45	7.59	3.51
R-312 Math. II. Introd. h.s.math.	9.82	4.59	9.58	4.24	9.70	4.41
F-410 Arithmetic Computation	21.25	26.64	27.35	21.60	24.39	24.37

*These estimates are weighted means and standard deviations based on all 15-year-olds in the Project TALENT probability sample. Weight D was used.

grades; and these four curves are intersected by a dashed line and a dotted line. The dashed line connects the grade means. Now let us return, for a moment, to the concept of the "standard group", discussed in Section C of this chapter. The dotted line on the graphs represents this standard group. It connects the four "standard group points", one on each grade curve. Each of these four points is located between the points corresponding to the two modal age groups. Each point is closer to the younger of the two modal age groups for the grade than to the older group, and the ratio of the split is supposed to be, at least roughly, three-to-five for boys and three-to-seven for girls in Grade 12. Applying these ratios to the lower grades probably results in a slight underestimate of the actual "standard group" means for these grades, since the lower the grade the more non-standard the group of students exactly at grade for age consists, non-standard-group cases probably include more students at the low end of the scale (e.g., those who will become dropouts, and those who will lose a year before graduating) than at the high end of the scale (e.g., students who will complete the four years of high school in less than four years). Nevertheless, the ratios of the younger to the older modal age group for the grade (five-to-three for boys and seven-to-three for girls), when applied to the corresponding means, provide estimates of the "standard group" means for the lower grades that are probably useful even though not exact.

In every case the dotted line is systematically above the line connecting the grade means. This probably reflects to some extent the reluctance of many schools to encourage acceleration of the bright students. As a consequence of this policy, the students who are right at grade-for-age are actually a somewhat superior group instead of being average. The data of Table IV-4 and the corresponding graphs tell us, among other things, the old familiar story about differences among the students in a grade being vastly greater than differences among grades. But for most tests, they tell the story even more emphatically by making it clear that differences among different age groups in a grade are far greater than differences among grades. Reading Comprehension, English, and Mathematics Part II are among the tests that differentiate most sharply among different age groups within a grade. It can be seen from Table IV-4 that the general pattern for these three tests is very similar. Figure IV-7 makes it apparent that the difference among Reading Comprehension grade means for boys within a grade is about twice as great as the difference among grades; and for girls about the same situation holds, to perhaps an even greater degree. The typical Grade 12 student who is one year older than his classmates in the "standard group"--in other words the student who is one year behind his age group in regard to grade placement--is reading at the level of a "standard group" student about three years younger than he; and the Grade 12 student who is two years older than his classmates is reading at the level of a standard group student six years younger on the average. (It is necessary to extrapolate the dotted line representing the standard group downward to see this.)

The student who is handicapped in reading is also bound to be handi-
capped in any efforts he may make to learn academic material.
Figure IV-2 shows the relationships for Physical Science Information,
and here too the picture is much the same as for Reading Comprehension.
The same thing is true for Social Studies Information (a graph for
which is not among those presented here).

Perhaps a word of caution should be injected at this point. It
must be recognized that these somewhat startling-looking amounts of
retardation that have been cited (e.g., six years in Reading Compre-
hension for students whose grade placement is two years behind that of
their contemporaries in the standard group) may be misleading if the
reader does not keep firmly in mind the familiar fact, already pointed
out, that differences within grade are vastly greater than differences
between grades, and also the implication of this fact for psychometric
methodology. To be specific, the minimal nature of inter-grade dif-
ferences in comparison with intra-grade differences means that grade
norms and other inter-group norms are rather unsatisfactory devices
for evaluating performance. Intra-group norms such as percentiles or
standard scores are far more useful and informative.

Why, then, are we devoting time and space to a discussion of
degree of retardation in terms of number of years of retardation
instead of relative standing within grade, and why will we discuss
acceleration in the same terms? The answer is that this approach
seems useful as a means of providing some notion of normal growth
patterns for different levels of ability. It is certainly not intended
to imply, however, that just because Grade 12 students who are 20 years
old are reading at the level of 14-year-old boys who are making normal
progress, the 20-year-olds should be pushed back to Grade 8 or 9. That
would be a ridiculous conclusion, of course, but one which sometimes
follows from misunderstanding of grade norms.

Now that the reader has been duly warned to guard against the
possibility of misinterpreting the procedure of expressing deviations
from the norm as a function of number of years of grade placement let
us resume the discussion (cautiously!).

In order to facilitate comparison of the patterns for all tests
directly, the mean standard scores shown in Table IV-4 have been sum-
marized for Grade 9 in Table IV-6 and for Grade 12 in Table IV-7.

In all the areas mentioned thus far in the present discussion--
Reading Comprehension, English, Mathematics II, Physical Sciences,
Social Studies--not only are the older students even further behind
in their achievement levels than their grade placement would indicate,
but the accelerated students are further advanced in ability and
achievement than their grade placement would indicate. Students who
are one year accelerated not only read better and know more, on the
average, than unaccelerated students of the same age, but they also
read better and know more than their one-year-older classmates who

Table IV-6. Age group means* for <u>Grade 9 boys</u> and <u>Grade 9 girls</u> (Subsample 0)
on 18 selected Project TALENT tests

Code #	Test	Mean Standard Scores*									Tot.	Range**
		Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18	Age 19	Age 20+		
		BOYS										
R-102	Vocab.(Info. I)	.65	.09	.15	-.16	-.63	-.88	-.86	-.84	-2.04	-.07	1.03
R-105	Soc. Stud. Info.	.86	.34	.24	-.10	-.63	-.99	-.83	-.58	-1.62	.00	1.33
R-107	Phys. Sci. Info.	.29	.40	.36	.06	-.34	-.67	-.82	-1.09	- .84	.15	1.07
R-108	Biol. Sci. Info.	.86	.00	.09	-.12	-.53	-.63	-.34	-.82	-1.85	-.07	.72
R-111	Elec. Info.	.15	.33	.39	.21	-.04	-.36	-.21	-.30	-1.02	.26	.75
R-112	Mech. Info.	.17	.34	.54	.37	-.01	-.34	-.40	-.36	-1.04	.39	.88
R-114	Home Ec. Info.	-.86	-.56	-.52	-.62	-.88	-.98	-.84	-.96	-1.48	-.61	.46
R-115	Sports Info.	.44	.40	.43	.11	-.42	-.66	-.42	-1.21	-1.57	.19	1.09
R-190	Info. Part I Tot.	.66	.20	.20	-.14	-.68	-1.02	-1.01	-1.08	-2.04	-.05	1.22
R-230	English Total	.60	-.07	-.11	-.42	-1.03	-1.23	-1.17	-1.62	-2.15	-.35	1.16
R-250	Read. Comp.	.69	.05	-.05	-.38	-.92	-1.06	-1.09	-.85	-1.41	-.28	1.11
R-260	Creativity	.86	.10	.05	-.17	-.60	-.72	-.42	-.35	- .87	-.11	.82
R-270	Mech. Reas.	.28	.17	.44	.28	-.06	-.36	.15	-.78	- .67	.30	.80
R-282	Vis. in 3 Dim.	.09	-.02	.07	-.05	-.31	-.53	-.24	-.93	-1.10	-.03	.60
R-290	Abst. Reas.	.30	.09	.08	-.17	-.62	-1.08	-.80	-1.68	-1.98	-.11	1.17
R-311	Math. I.(Ar.Reas.)	1.13	.09	.13	-.17	-.62	-.91	-.56	-1.30	-1.19	-.08	1.04
R-312	Math. II.(Introd.)	.36	.19	.10	-.19	-.75	-.86	-1.04	-1.40	-1.64	-.12	1.05
F-410	Arith. Comput.	.09	-.28	-.04	-.24	-.68	-.87	-1.20	-1.42	-3.11	-.21	.83
N'***		7	96	1719	1323	356	79	6	2	2	3590	
		GIRLS										
R-102	Vocab. (Info. I)	.75	-.32	-.19	-.47	-1.04	-1.22	-1.44	-.74	-	-.34	1.03
R-105	Soc. Stud. Info.	.82	-.22	-.14	-.46	-.97	-1.08	-.98	-.88	-	-.30	.94
R-107	Phys. Sci. Info.	1.00	-.04	-.13	-.32	-.81	-.93	-.73	-.20	-	-.23	.89
R-108	Biol. Sci. Info.	-.49	-.38	-.32	-.42	-.88	-1.20	-.93	-.22	-	-.40	.88
R-111	Elec. Info.	-.55	-.34	-.37	-.45	-.66	-.61	-1.06	-.72	-	-.41	.32
R-112	Mech. Info.	-.86	-.52	-.46	-.59	-.96	-1.05	-1.31	-.77	-	-.54	.59
R-114	Home Ec. Info.	.51	.16	.46	.35	-.26	-.39	-.26	.60	-	.37	.85
R-115	Sports Info.	-.40	-.63	-.42	-.60	-.94	-.98	-.72	-1.06	-	-.51	.56
R-190	Info. Part I Tot.	.38	-.30	-.21	-.48	-1.08	-1.27	-1.30	-.69	-	-.36	1.06
R-230	English Total	.82	.15	.24	-.06	-.61	-.96	-1.42	-.04	-	.09	1.20
R-250	Read. Comp.	1.02	-.06	.00	-.31	-.84	-1.07	-1.58	-.06	-	-.16	1.07
R-260	Creativity	.46	-.23	-.12	-.31	-.81	-.99	-.61	-.23	-	-.23	.87
R-270	Mech. Reas.	-.67	-.48	-.42	-.57	-.95	-1.17	-1.02	-1.61	-	-.51	.75
R-282	Vis. in 3 Dim.	-.53	-.31	-.14	-.32	-.59	-.74	-.98	-.94	-	-.24	.60
R-290	Abst. Reas.	.31	-.10	.02	-.32	-.95	-.89	-.77	.21	-	-.15	.97
R-311	Math. I.(Ar.Reas.)	-.07	-.19	-.04	-.31	-.80	-.80	-.77	-1.59	-	-.18	.76
R-312	Math. II.(Introd.)	-.08	-.02	.05	-.22	-.74	-.91	-1.13	-.16	-	-.09	.96
F-410	Arith. Comput.	.03	-.06	.18	-.03	-.58	-.85	-.82	-.18	-	.05	1.03
N'***		3	131	2110	1141	177	36	6	1	0	3605	

*These means, which are extracted from Table IV-4, are based on weighted cases. School
Weight A was used. The means are expressed as standard scores based on the total
population of 15-year-olds.
**Range of Standard Score Means (for ages 13-17)
***N' is the same as in Table IV-4

Table IV-7. Age group means* for <u>Grade 12 boys</u> and <u>Grade 12 girls</u> (Subsample 0) on 18 selected Project TALENT tests

Code #	Test	Mean Standard Scores*									Tot.	Range**
		Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18	Age 19	Age 20+		
					— BOYS —							
R-102	Vocab.(Info. I)	2.08	-	-	-0.09	0.88	0.84	0.47	-0.03	-0.46	0.67	1.34
R-105	Soc. Stud. Info.	1.49	-	-	0.47	0.88	0.85	0.52	0.08	-0.45	0.70	1.33
R-107	Phys. Sci. Info.	2.38	-	-	-0.33	0.94	0.83	0.48	-0.07	-0.48	0.67	1.42
R-108	Biol. Sci. Info.	1.81	-	-	1.00	0.43	0.61	0.41	0.01	0.00	0.51	.61
111	Elec. Info.	2.21	-	-	0.44	1.09	1.13	0.90	0.47	-0.11	1.01	1.24
R-112	Mech. Info.	1.83	-	-	1.31	1.14	1.29	1.13	0.77	0.39	1.20	.90
R-114	Home Ec. Info.	1.12	-	-	-0.64	-0.14	-0.06	-0.22	-0.43	-0.63	-0.13	.57
R-115	Sports Info.	2.59	-	-	0.68	1.07	1.00	0.70	0.23	-0.12	0.86	1.19
R-190	Info. Part I Tot.	2.53	-	-	0.25	1.09	1.07	0.67	0.06	-0.43	0.89	1.52
R-230	English Total	0.60	-	-	0.00	0.50	0.46	0.15	-0.40	-0.69	0.31	1.19
R-250	Read. Comp.	1.56	-	-	0.46	0.72	0.68	0.27	-0.23	-0.72	0.50	1.44
R-260	Creativity	1.84	-	-	-0.65	0.63	0.76	0.38	-0.10	-0.40	0.59	1.16
R-270	Mech. Reas.	0.98	-	-	0.07	0.82	0.92	0.77	0.28	0.37	0.84	.64
R-282	Vis. in 3 Dim.	2.17	-	-	-0.17	0.50	0.59	0.45	0.16	0.24	0.52	.43
R-290	Abst. Reas.	1.78	-	-	-1.17	0.44	0.49	0.26	-0.26	-0.66	0.37	1.15
R-311	Math. I.(Ar.Reas.)	1.83	-	-	0.08	0.78	0.80	0.48	-0.24	-0.56	0.64	1.36
R-312	Math. II.(Introd.)	2.79	-	-	0.18	1.03	0.77	0.33	-0.31	-0.68	0.58	1.71
F-410	Arith. Comput.	1.67	-	-	-0.05	0.41	0.43	0.16	-0.18	-0.49	0.31	.92
N'***		1	0	0	2	88	1688	868	136	24	2807	
					— GIRLS —							
R-102	Vocab.(Info. I)	-	0.91	-0.03	0.64	0.34	0.45	0.22	-0.75	-0.78	0.36	1.23
R-105	Soc. Stud. Info.	-	0.03	1.13	0.68	0.36	0.40	0.21	-0.53	-0.77	0.33	1.17
R-107	Phys. Sci. Info.	-	0.83	0.05	0.38	-0.19	-0.07	-0.26	-0.87	-1.11	-0.14	1.04
R-108	Biol. Sci. Info.	-	1.00	0.59	0.22	0.05	0.16	0.09	-0.44	-0.59	0.12	.75
R-111	Elec. Info.	-	1.14	0.87	-0.64	-0.22	-0.22	-0.29	-0.60	-0.60	-0.25	.38
R-112	Mech. Info.	-	0.27	-0.51	-0.64	-0.21	-0.04	-0.13	-0.43	-0.57	-0.08	.53
R-114	Home Ec. Info.	-	1.38	1.38	0.18	0.83	1.10	0.94	0.55	0.41	1.03	.69
R-115	Sports Info.	-	0.60	-0.40	-0.09	-0.20	-0.02	-0.15	-0.73	-1.16	-0.08	1.14
R-190	Info. Part I Tot.	-	0.92	0.38	0.39	0.26	0.40	0.19	-0.63	-0.86	0.31	1.26
R-230	English Total	-	-0.04	0.28	0.98	0.76	0.79	0.60	0.00	-0.31	0.72	1.10
R-250	Read. Comp.	-	0.66	0.84	1.10	0.58	0.63	0.42	-0.35	-0.83	0.55	1.46
R-260	Creativity	-	0.80	-1.01	0.24	0.37	0.41	0.20	-0.33	-0.92	0.33	1.33
R-270	Mech. Reas.	-	1.45	-0.67	-0.33	-0.19	-0.22	-0.34	-0.75	-0.91	-0.26	.72
R-282	Vis. in 3 Dim.	-	1.23	0.30	0.24	0.11	0.14	0.05	-0.33	-0.67	0.11	.81
R-290	Abst. Reas.	-	0.84	0.84	0.70	0.35	0.30	0.07	-0.53	-1.03	0.22	1.38
R-311	Math. I.(Ar.Reas.)	-	-0.17	-0.45	1.07	0.31	0.42	0.11	-0.49	-0.61	0.32	1.03
R-312	Math. II.(Introd.)	-	-0.84	-0.38	0.81	0.17	0.18	-0.07	-0.42	-0.74	0.10	.92
F-410	Arith. Comput.	-	****	-0.39	0.70	0.42	0.45	0.29	-0.24	-0.22	0.39	.69
N'***		0	1	1	5	116	1923	692	68	9	2815	

*These means, which are extracted from Table IV-4, are based on weighted cases. School Weight A was used. The means are expressed as standard scores based on the total population of 15-year-olds.

**Range of Standard Score Means (for ages 16 to 20+)

***N' is the same as in Table IV-4

****Data not available

constitute the standard group. As a matter of fact, in these terms the student who is one year ahead of his age group in regard to grade placement is about two years ahead of them in regard to reading ability, achievement in English and high school mathematics, and information in academic areas such as physical science and social studies.

But, interestingly enough, this pattern breaks down on some of the tests. It begins to break down on Abstract Reasoning, which is shown in Figure IV-10, and on Arithmetic Reasoning (Figure IV-11). For these tests students who are one year accelerated tend to get raw scores that are hardly higher, or not higher at all, than those achieved by their classmates who are in the "standard group" of students at grade-for-age. The accelerated students do better than unaccelerated students of their own age but no better than unaccelerated students a year older than they, and in some cases they actually do slightly worse. Whatever the factors that result in a student's becoming accelerated, they are apparently more closely associated with superior skill in reading than with superior ability in arithmetic reasoning or abstract reasoning. Or looked at another way, perhaps the failure of the accelerated group as a whole to do as much better than their classmates in abstract reasoning and arithmetic reasoning as in reading comprehension is primarily the effect of acceleration. Conceivably growth in the kinds of mental skills involved in abstract reasoning and arithmetic reasoning is considerably more dependent on maturation of ability than on scholastic experience, at least in the age range involved here (early teens). Thus the fact that the accelerated students have lived a year less than their unaccelerated classmates, and therefore have had a year less for these skills to mature, is predominant over the fact that they are being exposed to scholastic experiences at a higher grade level than most of their contemporaries. Skill in reading, on the other hand, is of course very much dependent upon the availability of the opportunity to read widely and extensively in a great many areas, and interest in taking advantage of that opportunity. In other words, it is quite dependent on practice and experience in reading. Insofar as students who are a year accelerated are those who have tended to do more reading, whether as a result of this acceleration or as an underlying factor leading to it, they may thus have somewhat better achievement in reading than would be expected solely on the basis of their scores on Abstract Reasoning. This is sometimes referred to as "over-achievement in reading comprehension" (over-achievement in relationship to abstract reasoning).

This so-called "over-achievement" in reading is of particular interest because it appears to fit in neatly with one of the previous findings of Project TALENT, to the effect that students in vocational high schools tend to "under-achieve" in Reading Comprehension in comparison with their Abstract Reasoning scores. This finding has been interpreted to indicate that the vocational students are "under-achieving" because they are getting too little formal instruction in English and too little experience in coping with the printed word. Our present data, dealing with the joint relationship of age and grade to performance, is the opposite side of this same coin. Here, apparently, we see a situation

where the accelerated students, unlike the vocational students, are "over-achieving" in reading comprehension because they are getting extra experiences and extra emphasis in this area. Whether the extra experiences are part of the formal scholastic program or whether they are obtained outside of school is somewhat immaterial to the interpretation. The effects are the same either way. In any event, the fact that these accelerated students perform better in reading, English, and high school mathematics than their unaccelerated classmates, even though they do not score markedly higher in abilities such as abstract reasoning, growth in which depends more on maturation than on formal training, may be regarded as strong evidence that school performance does not suffer as a result of moderate acceleration of better-than-average students.

Other tests on which accelerated students tend to score only slightly higher than their unaccelerated classmates are Creativity and Electrical and Electronics Information. And then there are a handful of tests in which there is an actual and sizable reversal of the accelerated students' superiority over their unaccelerated classmates. Visualization in Three Dimensions falls in this category, and Mechanical Reasoning and Mechanical Information are perhaps even more spectacular instances of it. Also in this category in which the accelerated students do not sparkle especially brightly are specialized areas of information such as Home Economics, and Sports Information (especially in the case of girls).

Let us recognize, however, that even though the accelerated students are not as good as their classmates in the standard group in these areas the converse is not true, that the over-age students are better informed or have better aptitudes in these particular areas. Just as the over-age students are very much below average in academic skills, they are also substantially below average in mechanical information and mechanical reasoning. The men who can repair automobiles satisfactorily, and keep the jets flying, are not likely to come from the over-age group.

On Visualization in Three Dimensions*, however, the very over-age students make a better showing, relatively, than on most of the other tests. Evidently students are not accelerated merely because they are superior in three-dimensional visualization, and they do not fall behind merely because they are poor in it. Spatial visualization is apparently a skill which is very much dependent on maturation and hardly at all dependent on formal scholastic instruction.

The range columns of Tables IV-6 and IV-7 are worth particular attention. The tests where the range of standard score means for age groups is smallest within a single grade are those on aptitudes and abilities that we have already pointed out have very little association with success in school. Visualization in Three Dimensions, it will be noted, falls in this category.

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*Table IV-4, Section N.

F.   Summary and Conclusions

1.   Hypothetical and actual relation of grade to age.

In our sample of 15-year-olds (i.e., students who had reached
their fifteenth birthday but not their sixteenth by March 1 of the
year in which they were tested), students who started Grade 1 at the
usual age and have progressed at the normal rate should be in either
Grade 9 or Grade 10, depending on the exact month of birth and the
age at which they became eligible to enter Grade 1, in the area where
they were living at the time. Presumably, if all students progressed
normally in school and there were no dropouts, the ratio of students
in the higher of the two modal grades (e.g., Grade 10) to students in
the lower one (e.g., Grade 9) for a single age group (e.g., age 15)
would be somewhere in the vicinity of two-to-one after correction for
the effects of differential birth rates in different months. Like-
wise, under these same hypothetical conditions the ratio of students
in the younger of the two modal age groups within a grade to the
older would be roughly two-to-one. For instance, the ratio of 14-
year-olds to 15-year-olds in the ninth grade, the ratio of 15-year-
olds to 16-year-olds in Grade 10, the ratio of 13-year-olds to 14-
year-olds in Grade 8, etc., would be about two-to-one.

Departures from this simple hypothetical situation are of course
the normal state of affairs. These departures are due in part to
differential birth rates in different months and in different years.
But much more significant from the viewpoint of educational policies
and practices, they are due to dropout (a problem of major scope),
acceleration, entrance into the first grade substantially before the
sixth birthday, and retardation. Since policies of 100 per cent
promotion and grade placement strictly on the basis of age are not
universal practices, universally applied without exception, there are
some students (their number is unknown at present) who require more
than 12 years to complete Grades 1-12, and some other students (un-
doubtedly a far smaller number, although their exact count, too, is
unknown) who are permitted to complete Grades 1-12 in less than 12
years, or to get a head start through admission to Grade 1 at age five.

The effects of these widely variable factors--dropout, scholastic
retardation, early admission, and scholastic acceleration--on age-
grade interrelationships are quite complex. The age-grade distri-
bution resulting from this complex interaction has been shown in
Table IV-2. Table IV-3 shows the corresponding percentage distri-
bution that would result if the effects of differential birth rate
were eliminated. It appears from these tables that the great majority
of the departures from normal grade placement with respect to age are
in the direction of retardation, rather than in the direction of
acceleration or early admission. While the picture is not quite
clear because of the fact that some students of a particular age
belong in one grade and some in another (on account of different

months of birth), the data suggest that at the Grade 9 level there is
well over three times as much retardation as acceleration, but that by
Grade 12 the number of retarded students has been so greatly reduced
(presumably by dropout) that it is almost down to the number of ac-
celerated students. A very substantial part of the dropout seems not
to occur until after the student has passed his seventeenth birthday.

We can carry the analysis one step further by classifying the
students in terms of their own patterns of grade-to-grade progression
in relation to their aptitude and achievement levels. This approach
is applied in the next section (Section 2, below), in which the inter-
relationships of age-grade patterns and aptitude-and-achievement pat-
terns are discussed briefly.

2. Interaction of age-grade patterns and performance patterns.

Very detailed information about the interrelations of age, grade,
and test performance are presented in this chapter primarily in Tables
IV-4, IV-6, and IV-7, and in Figures IV-1 through IV-12, and are not
repeated here. The primary purpose of the discussion below is to sum-
marize briefly a few salient points. For this purpose, the high school
population can be thought of in terms of five segments:

First: the accelerated students, who tend to be superior to their
classmates in academic skills, in achievement in school
subjects, and in most kinds of information; but much less
so or even not at all, in non-school-related aptitudes such
as visualization in three dimensions, and in certain speci-
alized non-academic areas of information such as mechanics.
There is some evidence, primarily in the far greater superi-
ority of these students in certain school-related subjects
such as reading and English and high school mathematics than
in intellectual skills such as abstract reasoning which are
not directly related to the high school curriculum, that the
superiority of the students is at least partly a result of
their acceleration and not entirely a cause.

Second: the students who are at the normal grade for their age,
particularly those of them who are likely to continue to be
at grade-for-age until they graduate. They will constitute
a useful normative group--particularly when follow-up data
become available on them.

Third: students who are potential dropouts primarily because they
are about one year behind their age group in regard to grade
placement. While some members of this group resemble those
in the fourth group, described below, many of them are
qualitatively more like those in the second group, mentioned
in the paragraph above, and are not in that group primarily
because they are victims of circumstance. The circumstance
that has victimized some of these members of "Group 3" is a
date of birth just a month or two too late to qualify them

to enter the first grade when they are nearly six years old. Contributing to this "victimization" is the circumstance that they live in a jurisdiction where the date of birth that has been decided by law, ordinance, or local school regulation to qualify a child for admission to the first grade is so early and so rigidly enforced that many children who were born exactly the same day as these boys and girls we are now discussing, but who live in a different area, start the first grade one full year earlier. Boys and girls who do not start the first grade until they are nearly seven, and then are lock-stepped in a rigid one-year-at-a-time progression regardless of their ability, are nearly 18 before they become eligible to enter Grade 12. A substantial proportion of them therefore feel under considerable pressure to get out of school, even without a diploma, and to do some of the things they become eligible to do at age 18--e.g., get a job; join the Army; get married. Thus, this group contributes too many boys and girls to the unfortunately large group of young people who are capable of graduating from high school but do not. Doing something about the situation of these boys and girls to enable them to earn their high school diplomas without having to stay in high school until they are about 19 could help to reduce the dropout rate and alleviate the dropout problem.

Fourth: the students who are from one-and-a-half to about three years behind their age group in regard to grade placement. The myth that while boys in this category may not be good in academic skills they are really better than average in electronic and mechanical aptitude seems clearly to be just a myth--at least as a generalization applying to this group as a whole--though there may be and probably are a few individual exceptions. This group has a very high dropout rate.

Fifth: the students who are more than three years behind their age group in regard to grade placement, but who nevertheless stay in school. Members of this group almost certainly have some special merits in terms of persistence--and there is some hint in the data, though nothing conclusive on this preliminary analysis, that they may be superior in basic ability to the potential dropouts who are only moderately over-age for their grade. It seems probable, although we do not have any real evidence on this point as yet, that many of these very much over-age students are ex-dropouts who have returned to school after having been out for a couple of years.

Chapter V.   THE FIFTEEN-YEAR-OLDS

A.   Introduction

In Chapter III, characteristics of that comparative rarity among
dropouts, the 15-year-old dropout, were discussed. In Chapter IV, the
15-year-old still in school was placed against a background of students
in various age-and-grade categories (with particular emphasis on the
high school grades). The present chapter has as its function to present
and interpret data based on all the 15-year-olds in the study (or on a
probability sample of them), against the backdrop provided by Chapters
III and IV. Chapter V, thus, is intended to tell us something about the
characteristics of a very varied group of boys and girls, constituting
an across-the-board sample of 15-year-olds. Membership in the popu-
lation represented by this sample is delimited by only two requirements;
its members are 15 years old and resident in the United States. These
data, then, are largely of a census type, designed chiefly to throw some
light on what aptitudes and abilities, both individually and in combi-
nation, are available among the total group of Americans born in a given
twelve-month period (March 1944 through February 1945).

The composition (in terms of grade and sex) of the sample of 15-
year-olds on which the data presented in this chapter are based is sum-
marized in Table V-1. It should be observed that by far the largest
group of 15-year-olds are those in Grade 10. Grade 9 provides the next
largest group. Boys and girls who enter Grade 1 at the normal age
(about six) and make normal progress would normally be in Grade 9 or 10
(mostly the latter) on the March 1 when they are 15 years old. Which of
the two modal grades they would be in would depend, of course, on their
exact date of birth, and on local regulations concerning the exact age
at which children become eligible for admission to Grade 1.

The group below Grade 9 consists mostly of Grade 8 students,
although there are a few who are in Grade 6, or even lower.

B.   Intercorrelations Among Test Scores

Intercorrelations among 111 Project TALENT score variables are pre-
sented in Tables V-2 to V-4 inclusive. These intercorrelations are based

Table V-1   Composition of Project TALENT Sample of 15-Year-Olds
Cases With Complete Data*

Grade	No. of Cases in Sample			Corresponding Weighted**** No. of Cases (approx.)		
	Boys	Girls	Total	Boys	Girls	Total
12	36**	34**	70**	600	600	1,200
11	911**	1,242**	2,153**	16,300	22,900	39,200
10	19,924**	24,517**	44,441**	418,500	507,800	926,300
9	13,724**	12,591**	26,315**	292,600	265,800	558,400
8	217	120	337	45,100	26,300	71,400
7	37	26	63	7,900	5,200	13,100
6 or below	10	2	12	2,100	400	2,500
Not in School	4	6	10***	800	1,300	2,100
Subtotal	34,863	38,538	73,401	783,900	830,300	1,614,200
Grade Unknown	15	9	24	3,700#	1,800#	5,500#
Total	34,878	38,547	73,425	787,600	832,100	1,619,700

*These are the cases for which the "master tape file" (complete cases only, at present) has been completed.

**A representative 10 per cent sample of these Grade 9-12 15-year-olds was used, together with the entire special sample of non-high-school 15-year-olds, in the correlations, means, and standard deviations presented in Tables V-2 to V-5 inclusive; these correlations, means, and standard deviations are based on unweighted cases (complete cases, only). The 10 per cent sample of Grade 9-12 15-year-olds consisted of all those with "3" as the terminal digit of the six-digit testing number.

***This number does not agree exactly with the corresponding number in Table II-3, because of anomalies in the computer processing.

****Weight D was used. For a description of this weight, see Chapter II, Section C.

#Estimated.

Table V-2

Intercorrelations Among III Project Talent Variables
for 15-Year-Old Boys

Table V-2a.   15-year-old boys in high school (10% Subsample. N-3373)

Column headers (diagonal): 1 Grade, 2 Sex, 3 Screening, 4 Vocab I, 5 Literature, 6 Music, 7 Soc. Stud., 8 Math, 9 Phys. Sci, 10 Bio. Sci, 11 Sci Attitude, 12 Aero & Space, 13 Elec & Electron, 14 Mechanical, 15 Farming, 16 Home Ec, 17 Sports, 18 Art, 19 Law, 20 Health, 21 Engineering, 22 Architecture, 23 Journalism, 24 Foreign Travel, 25 Military

Var*	Var	Code	Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	1		Grade	1		203	306	346	255	282	338	194	304	276	165	151	196	176	203	260	256	243	296	206	189	226	236	169
	2		Sex (1=M, 2=F)	2																								
1	3	R-101	Info I: Screening	3	203		459	398	369	503	325	381	389	394	309	313	430	419	368	421	379	352	411	382	237	279	301	232
2	4	R-102	" Vocab I	4	306	459		713	631	721	668	692	649	596	446	595	601	532	474	562	640	590	633	526	460	557	568	463
3	5	R-103	" Literature	5	346	398	713		651	706	641	590	573	514	443	421	335	391	512	655	559	568	418	477	566	588	484
4	6	R-104	" Music	6	255	369	631	651		608	576	534	459	443	491	442	386	336	405	474	595	483	506	396	432	513	515	405
5	7	R-105	" Soc.Studies	7	282	503	721	706	608		630	655	615	551	562	492	499	480	441	584	614	583	606	471	458	535	602	481
6	8	R-106	" Math	8	338	325	668	641	576	630		651	549	508	535	542	438	372	403	492	537	515	535	423	431	476	496	402
7	9	R-107	" Phys. Sci	9	194	381	692	590	534	655	651		635	511	615	671	534	466	420	424	539	503	557	464	381	435	505	389
8	10	R-108	" Bio Sci	10	304	369	649	573	499	615	549	635		495	543	513	530	508	438	411	501	479	561	451	386	417	473	362
9	11	R-109	" Sci Attitude	11	276	394	596	514	443	551	508	511	455		439	418	458	411	373	461	483	475	484	393	342	411	418	315
10	12	R-110	" Aero & Space	12	165	309	624	556	491	562	535	615	543	439		595	514	376	362	389	447	480	465	430	363	430	488	403
11	13	R-111	" Elec & Electron	13	151	313	595	443	442	492	542	671	513	418	595		618	405	400	298	432	442	436	451	308	361	388	293
12	14	R-112	" Mechanical	14	196	430	601	421	386	499	438	534	530	458	618		558	444	374	407	424	465	478	246	355	369	289
13	15	R-113	" Farming	15	176	419	532	395	336	480	372	466	508	411	376	405	558		410	362	357	401	430	403	274	313	315	256
14	16	R-114	" Home Ec	16	203	368	474	391	405	441	443	420	438	373	362	400	444	410		321	380	358	426	348	280	336	314	238
15	17	R-115	" Sports	17	260	421	562	512	474	584	492	424	411	461	389	298	374	362	321		466	455	446	339	333	455	417	401
	18	R-131	Info II:Art	18	256	379	640	655	595	614	537	539	561	483	497	432	407	359	380	466		545	570	456	443	522	567	438
	19	R-132	" Law	19	243	362	590	559	483	583	515	503	475	480	442	424	401	358	455	545		536	446	387	410	476	409
	20	R-133	" Health	20	296	411	633	568	506	606	535	557	561	484	465	436	463	430	426	446	475	536		475	397	475	487	372
21	21	R-134	" Engineering	21	206	382	526	418	396	471	423	464	451	393	430	451	478	403	348	339	456	446	475		317	379	382	330
22	22	R-135	" Architecture	22	189	237	460	477	432	458	431	381	386	342	363	308	290	274	280	333	443	387	397	319	317	361	408	360
23	23	R-136	" Journalism	23	226	279	552	546	513	535	476	435	417	411	430	361	355	313	336	455	522	490	475	379	361	444	392
24	24	R-137	" Foreign Travel	24	236	301	568	588	515	602	496	505	473	418	488	388	369	315	514	417	567	476	487	382	408	444	411
25	25	R-138	" Military	25	169	232	463	484	405	481	402	389	362	315	403	293	289	256	238	401	438	409	372	330	360	392	411
26	26	R-139	" Acct,Bus,Sales	26	251	340	562	539	487	549	566	466	438	449	432	407	405	352	364	424	522	523	504	405	371	457	457	392
27	27	R-140	" Pract.Knowl.	27	239	462	527	474	432	512	408	420	412	432	382	364	366	340	366	424	508	485	521	459	322	415	434	337
28	28	R-141	" Clerical	28	267	261	412	388	344	378	462	340	324	300	293	282	304	280	296	319	378	368	388	312	280	355	316	276
29	29	R-142	" Bible	29	200	334	543	572	449	572	486	481	467	434	416	322	347	365	333	386	494	480	478	375	372	427	474	394
30	30	R-143	" Colors	30	082	152	267	254	252	235	254	246	212	195	195	216	191	159	177	168	265	238	237	180	200	174	237	168
31	31	R-144	" Etiquette	31	154	190	296	265	250	273	307	256	214	259	211	209	195	184	185	254	263	242	253	217	208	233	230	208
32	32	R-145	" Hunting	32	039	192	214	108	073	184	104	132	279	184	181	199	333	358	154	123	120	177	187	228	102	082	149	125
33	33	R-146	" Fishing	33	081	214	260	205	179	212	185	239	288	210	246	230	302	300	239	197	227	265	166	164	160	156
34	34	R-147	" Outdr Act(Other)	34	226	428	505	507	443	544	492	522	514	464	470	449	496	447	404	456	518	494	542	495	365	426	450	355
35	35	R-148	" Photography	35	191	295	451	393	368	415	388	370	352	355	348	337	283	281	324	422	369	428	360	283	348	350	258
36	36	R-149	" Games	36	199	314	458	454	418	443	451	411	358	362	336	327	293	239	304	397	426	396	411	360	297	355	361	315
37	37	R-150	" Theater,ballet	37	208	350	602	599	560	548	508	451	446	447	452	377	380	335	354	450	601	537	550	402	390	520	507	408
38	38	R-151	" Foods	38	142	144	372	391	382	320	346	286	256	242	279	263	234	148	241	242	353	283	302	234	261	292	328	254
39	39	R-152	" Miscellaneous	39	258	391	602	587	526	588	538	533	478	450	476	440	440	365	365	456	562	513	564	416	416	471	500	427
40	40	R-162	" Vocabulary II	40	290	401	713	647	589	669	595	530	570	529	524	489	494	445	446	507	671	629	656	518	443	632	561	451
41	41	R-172	Vocab Tot. (I & II)	41	123	470	960	740	661	754	689	703	666	614	631	597	601	537	498	582	700	649	690	562	488	625	608	443
42	42	R-190	Info I Total	42	337	553	080	799	724	847	791	819	756	674	723	723	701	620	594	645	693	636	691	580	509	596	631	506
43	43	R-192	Info II Total	43	329	501	800	764	677	771	690	680	660	615	625	559	574	524	507	596	790	739	760	633	577	655	687	590
44	44	R-100	Info Total (I & II)	44	344	550	877	810	728	844	778	793	743	672	686	682	603	580	646	747	704	735	615	547	634	669	550
45	45	R-211	Memory for Sentences	45	045	149	213	164	132	181	174	183	179	187	155	131	183	194	163	154	170	198	198	154	116	141	179	104
46	46	R-212	Memory for Words	46	180	208	388	383	336	378	416	351	298	292	293	214	215	312	336	323	331	244	261	276	300	047
47	47	R-220	Disguised Words	47	264	328	554	532	509	474	494	438	406	412	369	335	352	305	303	411	507	425	457	341	345	420	447	318
48	48	R-231	English:Spelling	48	265	350	485	472	423	468	475	388	353	327	270	255	276	305	256	419	405	369	432	303	303	387	391	288
49	49	R-232	" Capitalization	49	209	354	397	362	302	398	356	350	321	331	267	263	320	300	240	341	342	319	360	289	219	294	296	207
50	50	R-233	" Punctuation	50	285	358	582	540	477	565	601	511	456	460	394	387	353	327	430	470	468	432	373	344	430	430	520
51	51	R-234	" Usage	51	241	342	538	499	420	455	469	459	427	419	381	355	386	370	300	388	439	429	467	352	308	388	409	290
52	52	R-235	" Eff. Exp.	52	268	322	476	446	391	458	434	394	380	434	343	297	336	327	301	392	408	403	413	325	276	367	355	266
53	53	R-230	" Total	53	321	445	636	591	513	612	603	540	496	504	424	401	432	421	364	505	530	509	554	425	374	474	481	351
54	54	R-240	Word Functions	54	249	266	537	518	465	506	618	480	446	425	379	362	314	320	293	404	426	427	454	326	374	397	326
55	55	R-250	Reading Comprehension	55	324	434	742	698	589	710	647	622	599	595	564	490	496	474	420	540	632	594	614	482	445	550	573	460
56	56	R-260	Creativity	56	224	320	575	516	485	481	505	455	467	466	478	497	476	386	376	360	507	454	466	431	362	410	416	337
57	57	R-270	Mechanical Reasoning	57	174	281	534	397	380	432	485	549	478	420	517	561	539	405	342	310	389	376	396	420	289	305	340	268
58	58	R-281	Vis. in 2 Dimens	58	157	204	312	258	251	274	316	312	252	276	255	262	294	228	261	252	274	228	237	256	209	217	175
59	59	R-282	Vis. in 3 Dimens	59	162	166	407	338	331	364	444	427	349	309	358	425	360	269	273	207	340	299	297	326	265	257	285	200
60	60	R-290	Abstract Reasoning	60	223	251	482	427	396	453	493	458	404	394	385	377	348	294	272	362	400	358	378	326	265	322	352	251
61	61	R-311	Math I	61	271	315	603	526	467	593	633	532	471	505	446	456	447	395	373	461	458	485	483	391	367	434	470	347
62	62	R-312	Math II	62	302	314	595	568	495	572	746	556	475	472	440	432	382	352	357	458	473	471	496	382	369	433	424	368
63	63	R-320	Math I & II	63	315	343	653	600	527	618	760	575	520	483	447	405	397	501	500	520	535	421	402	473	461	391
64	64	R-333	Math III	64	322	167	341	358	317	304	567	321	290	279	270	261	188	168	191	268	308	283	296	225	241	240	256	220
65	65	R-340	Math Total(I+II+III)	65	348	334	641	601	527	601	772	589	520	478	476	424	335	384	492	511	516	531	415	399	464	456	384
66	66	R-410	Arith Computation	66	219	394	372	349	316	403	417	297	253	331	196	204	239	274	252	433	314	311	355	281	245	283	273	226
67	67	R-420	Table Reading	67	152	130	134	156	155	115	146	094	066	066	072	046	085	153	138	109	129	104	106	065	129	089
68	68	R-430	Clerical Checking	68	135	110	066	109	125	063	085	018	006	038	020	009	015	030	032	099	096	046	069	032	074	057	079	055
69	69	R-440	Object Inspection	69	112	113	118	138	160	108	112	109	084	094	088	078	100	078	070	113	159	092	127	117	097	071	125	079
70	70	A-410	Arith Computation	70	117	200	180	190	178	203	254	150	090	160	075	087	089	131	117	258	164	158	186	132	145	144	139	132
71	71	A-420	Table Reading	71	036	075	064	028	003	004	006	070	051	047	058	056	069	082	030	029	037	056	094	058	012	054	011
72	72	A-430	Clerical Checking	72	077	032	030	022	048	027	005	054	083	040	079	064	078	031	018	015	016	027	025	030	019	011	001	005
73	73	A-440	Object Inspection	73	067	046	032	060	089	022	042	034	003	018	020	024	013	029	047	085	018	061	059	052	008	055	035
74	74	F-410	Arith Computation	74	198	364	358	308	271	378	335	277	284	319	214	212	266	266	248	354	286	290	323	275	202	254	254	189
75	75	F-420	Table Reading	75	172	255	249	242	210	244	207	200	183	198	149	162	170	147	155	239	227	207	231	202	133	172	205	134
76	76	F-430	Clerical Checking	76	204	233	253	254	240	237	226	171	167	147	124	119	135	121	129	241	233	189	221	157	163	166	224	165
77	77	F-440	Object Inspection	77	134	155	178	180	197	166	156	160	141	152	131	117	155	083	113	151	198	142	166	152	126	113	166	107
78	78	A-500	Preferences	78	019	112	028	027	015	038	076	052	055	058	060	046	021	005	020	018	004	030	003	001	003	010	022	024
79	79	R-601	SAI: Sociability	79	166	214	114	095	124	110	055	030	004	096	019	005	080	091	120	242	136	086	135	115	078	110	060	091
80	80	R-602	" Soc.Sensitivity	80	113	189	180	203	176	177	162	143	131	133	096	095	085	016	149	164	211	126	182	124	130	167	138	139
81	81	R-603	" Impulsiveness	81	048	089	045	072	046	032	027	011	023	013	027	028	022	015	040	064	063	056	042	026	036	045	030	090
82	82	R-604	" Vigor	82	092	192	188	166	156	186	139	131	147	148	101	073	134	116	146	286	174	140	191	168	107	157	123	131
83	83	R-605	" Calmness	83	105	222	245	219	211	223	225	202	189	194	179	191	176	187	214	218	233	182	231	187	154	200	154	175
84	84	R-606	" Tidiness	84	077	200	163	142	173	150	149	131	116	110	082	096	092	109	145	160	181	116	182	133	129	154	117	104
85	85	R-607	" Culture	85	081	175	140	164	193	148	160	112	099	093	101	091	072	078	135	140	176	176	153	120	144	137	097	106
86	86	R-608	" Leadership	86	021	055	064	092	112	064	102	040	018	034	040	002	025	016	062	145	103	060	059	029	063	100	054	094
87	87	R-609	" Self-Confidence	87	100	225	219	174	171	199	207	177	163	169	175	182	183	147	175	178	190	165	190	169	143	151	147	149
88	88	R-610	" Mature Personality	88	104	205	205	196	192	208	232	174	146	146	133	147	140	131	160	184	191	168	207	169	154	147	139
89	89	F-701	Int Inv: Phys Sci	89	070	058	225	202	215	215	345	314	240	168	273	296	156	105	146	162	192	179	179	169	151	175	156	162
90	90	F-702	" Biol Sci & Med	90	063	045	149	174	189	146	214	195	190	094	161	125	032	035	113	114	164	118	152	110	110	151	121	130
91	91	F-703	" Pub Serv.	91	027	004	025	082	066	079	068	002	010	012	023	056	094	051	032	091	053	052	015	022	063	089	043	085
92	92	F-704	" Lit-Ling.	92	034	025	072	182	167	116	131	055	059	044	039	038	119	042	036	131	089	057	007	107	141	087	133
93	93	F-705	" Soc.Serv.	93	009	042	068	006	024	017	022	042	060	061	088	038	060	072	001	018	036	029	065	005	022	037	000
94	94	F-706	" Artistic	94	002	028	026	103	113	037	065	050	061	003	048	015	036	030	044	014	109	019	035	045	090	058	056	047
95	95	F-707	" Musical	95	015	122	052	079	194	042	040	033	047	063	136	013	091	067	476	037	037	064	037	008	047
96	96	F-708	" Sports	96	033	104	041	054	056	089	057	032	034	065	037	069	004	068	025	320	068	054	062	051	043	085	047	105
97	97	F-709	" Outdr Rec.	97	017	089	016	049	067	013	072	008	055	020	012	024	068	150	036	024	010	009	010	082	015	031	027
98	98	F-710	" Bus.-Mgmt.	98	031	016	060	002	003	013	007	083	070	041	089	121	113	070	008	056	008	010	035	017	031	033	020
99	99	F-711	" Sales	99	030	038	074	007	005	034	019	078	050	057	114	117	146	170	098	023	033	044	068	003	015	052	046
100	100	F-712	" Computation	100	030	021	010	024	049	033	132	041	032	025	068	005	006	062	040	054	074	011	021	029	002	028	015	010
101	101	F-713	" Office Work	101	042	112	193	158	107	161	118	165	167	181	160	177	114	056	157	136	119	089	091	046
102	102	F-714	" Mech-Tech	102	070	068	153	223	165	180	134	094	087	120	065	053	074	002	030	131	179	128	129	013	090	109	172	132
103	103	F-715	" Skilled Trades	103	071	133	256	248	206	241	268	214	187	200	202	161	118	101	093	152	229	192	195	129	122	160	220	139
104	104	F-716	" Farming	104	061	051	127	162	136	110	151	116	038	067	102	093	021	141	010	072	148	089	086	024	076	114	126	064
105	105	F-717	" Labor	105	094	190	290	279	247	278	254	245	238	226	221	198	160	111	154	194	280	230	246	175	160	205	252	173
106	106	C-001	Composite: I.Q.Comp.	106	355	423	754	691	599	716	766	654	611	612	575	530	523	480	435	557	625	596	614	473	446	545	564	447
107	107	C-002	" Gen.Acad.Apt.	107	364	460	783	720	628	735	786	678	620	618	571	542	534	494	456	584	641	617	648	512	468	569	577	456
108	108	C-003	" Verbal	108	363	494	810	780	639	797	706	631	655	611	594	507	525	495	447	585	661	615	657	509	468	583	592	455
109	109	C-004	" Quantitative	109	363	345	673	636	562	633	866	627	544	537	511	510	444	396	404	513	538	534	553	433	426	485	484	408
110	110	C-005	" Technical	110	239	434	764	608	562	668	666	643	741	568	761	847	784	564	499	451	568	557	572	555	348	351	583	467
** 111	111	C-006	" Sci. Apt.	111	340	448	811	715	639	742	807	781	701	636	686	700	654	537	497	558	646	625	651	555	476	557	583	467

Table V-2a (continued)

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	Acct,Bus Sales	Pract.Knowl.	Clerical	Bible	Colors	Etiquette	Hunting	Fishing	Outdr Act(Other)	Photography	Games	Theater Ballet	Foods	Miscellaneous	Vocabulary II	Voc Tot (I&II)	Info I Total	Info II Total	Info Tot (I&II)	Mem. for Sent.	Mem. for Words	Disguised Words	Spelling	Capitalization	Punctuation	Usage	Eff. Exp.	Eng. Total	Word Functions	Reading Comp.	Creativity	Mech. Reasoning	Code
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	
	253	239	267	200	082	154	039	081	226	191	199	268	142	258	290	323	337	329	344	095	180	264	265	209	285	241	268	321	249	324	224	174	

(The row codes running down the right margin are: R-101 through R-115, R-131 through R-141, R-143 through R-152, R-162, R-172, R-190, R-192, R-100, R-211, R-212, R-220, R-231 through R-235, R-230, R-240, R-250, R-260, R-270, R-281, R-282, R-290, R-311, R-312, R-320, R-333, R-340, R-410, R-420, R-430, R-440, A-410, A-420, A-430, A-440, F-410, F-420, F-430, F-440, R-500, R-601 through R-610, F-701 through F-717, C-001 through C-006.)

Var*	Var	Code	Description	N	58 Vis.in 2 Dimens	59 Vis.in 3 Dimens	60 Abstract Reasoning	61 Math I	62 Math II	63 Math I+II	64 Math III	65 Math Tot(I+II+III)	66 Arith Compt.	67 Table Reading	68 Clerical Checking	69 Object Inspection	70 Arith Compt.	71 Table Reading	72 Clerical Checking	73 Object Inspection	74 Arith Compt.	75 Table Reading	76 Clerical Checking	77 Object Inspection	78 Preferences	79 Sociability	80 Soc.Sensitivity	81 Impulsiveness	82 Vigor	83 Calmness
	1		Grade	1	157	162	223	271	302	315	322	348	219	152	135		117	036	077	067	198	172	204	134		106	113	048	092	105
	2		Sex (1=M, 2=F)	2																										
1	3	R-101	Info I: Screening	3	204	166	251	315	314	343	167	334	394	130	110	113	200	-075	032	046	364	255	233	155	112	214	189	089	192	222
2	4	R-102	" Vocab I	4	312	407	482	603	595	653	341	641	372	134	066	118	180	-064	-030	032	358	249	253	178	-028	114	180	045	188	245
3	5	R-103	" Literature	5	258	338	427	526	568	600	358	601	349	156	109	138	190	-028	022	060	308	242	254	180	-027	095	203	072	166	219
4	6	R-104	" Music	6	251	331	396	467	495	527	317	527	316	155	125	160	178	003	048	089	271	210	240	197	-015	124	176	046	156	211
5	7	R-105	" Soc.Studies	7	274	364	453	559	572	618	304	601	403	115	063	108	203	-084	-027	022	378	244	237	166	-038	110	177	032	186	223
6	8	R-106	" Math	8	316	444	493	633	746	760	507	772	417	146	085	112	254	-006	005	042	335	207	226	156	-076	055	162	027	139	225
7	9	R-107	" Phys. Sci	9	312	427	458	532	556	595	321	589	297	094	018	109	150	-070	-054	034	277	200	171	160	-052	030	143	011	131	202
8	10	R-108	" Bio. Sci	10	252	349	404	479	475	520	290	518	253	066	-006	084	090	-091	-083	003	284	183	167	141	-055	064	131	023	147	189
9	11	R-109	" Sci Attitude	11	276	309	394	505	472	530	274	520	331	109	038	094	160	-047	-040	007	319	198	197	152	-058	096	133	013	148	194
10	12	R-110	" Aero & Space	12	255	358	385	446	440	483	270	478	196	066	-020	088	075	-058	-070	018	214	149	124	131	-060	019	096	027	101	179
11	13	R-111	" Elec & Electron	13	262	425	377	456	432	483	261	476	204	069	-009	078	087	-066	-064	025	212	162	119	117	-046	005	095	028	073	191
12	14	R-112	" Mechanical	14	290	360	348	447	382	447	188	428	239	072	-015	100	089	-069	-078	024	266	170	135	155	-021	080	085	022	134	176
13	15	R-113	" Farming	15	228	269	294	395	352	405	168	395	274	046	-030	037	131	-082	-091	-013	266	147	121	083	005	091	096	015	158	187
14	16	R-114	" Home Ec	16	201	273	272	373	357	397	191	384	252	085	032	078	117	-038	-018	029	248	155	129	113	-020	120	149	040	146	214
15	17	R-115	" Sports	17	252	207	362	461	458	501	268	412	433	153	099	113	258	-029	015	047	354	239	241	151	018	242	164	064	286	218
	18	R-131	Info II:Art	18	274	340	400	458	473	509	308	511	314	138	096	159	164	-037	016	085	286	227	233	198	004	136	211	063	174	233
	19	R-132	" Law	19	228	299	358	485	471	520	283	516	311	109	046	092	158	-056	-027	018	290	207	189	142	-030	086	126	056	140	182
	20	R-133	" Health	20	237	297	378	483	496	535	296	531	355	129	059	127	186	-054	-025	061	323	231	221	166	003	135	182	049	191	231
	21	R-134	" Engineering	21	256	326	326	391	382	421	225	415	281	104	032	117	132	-058	-030	059	275	202	157	152	001	115	124	076	168	187
	22	R-135	" Architecture	22	205	268	265	367	369	402	241	399	245	106	074	099	145	012	019	052	202	133	163	126	-003	078	130	036	101	154
	23	R-136	" Journalism	23	209	257	322	434	433	473	240	464	283	085	057	071	144	-054	-011	008	263	172	186	113	-010	110	162	045	157	200
	24	R-137	" Foreign Travel	24	217	285	352	420	424	461	256	456	273	129	079	125	139	-028	-001	055	254	205	224	166	-022	060	138	030	123	154
	25	R-138	" Military	25	175	200	251	347	368	391	220	384	226	089	055	079	132	-011	-005	035	189	134	165	102	024	091	139	090	131	175
	26	R-139	" Acct,Bus,Sales	26	234	296	365	447	465	523	285	515	318	130	065	107	161	-034	-011	044	297	213	207	146	-025	137	164	074	156	221
	27	R-140	" Pract.Knowl.	27	239	281	346	416	402	446	200	429	338	154	078	151	151	-083	-018	057	340	295	259	265	011	174	160	049	192	211
	28	R-141	" Clerical	28	183	205	251	348	370	393	234	392	286	117	115	102	170	009	056	032	236	152	197	127	027	119	152	060	152	201
	29	R-142	" Bible	29	216	261	340	452	457	496	273	489	297	093	083	080	169	-037	017	015	253	166	195	120	013	110	198	060	173	240
	30	R-143	" Colors	30	156	176	189	194	213	223	146	222	133	065	059	084	068	005	022	054	124	085	174	098	-036	044	048	006	050	045
	31	R-144	" Etiquette	31	193	203	238	287	317	332	190	330	232	072	070	084	135	-001	021	050	194	100	149	101	022	081	085	029	096	114
	32	R-145	" Hunting	32	104	111	097	151	086	124	051	121	072	006	-055	020	025	-036	-017	-009	081	044	019	053	-003	048	018	025	081	062
	33	R-146	" Fishing	33	118	139	141	187	150	181	091	175	112	034	000	045	068	-017	-022	016	092	064	052	063	-054	063	045	062	127	088
	34	R-147	" Outdr Act(Other)	34	285	324	367	460	457	500	254	491	335	125	053	120	171	-059	-027	047	313	232	211	165	008	182	158	052	222	246
	35	R-148	" Photography	35	157	235	282	348	367	392	224	388	287	098	044	088	150	-041	-025	022	262	176	179	133	-010	120	158	038	147	210
	36	R-149	" Games	36	214	277	305	371	417	433	268	433	286	120	082	099	167	-020	019	048	233	184	187	129	-004	142	141	083	187	179
	37	R-150	" Theater,ballet	37	225	286	366	448	465	499	269	491	322	129	093	125	166	-026	016	057	298	204	225	163	003	127	172	071	146	210
	38	R-151	" Foods	38	103	170	234	271	310	319	195	321	153	078	061	102	071	013	022	067	153	093	120	114	-001	081	097	072	081	131
	39	R-152	" Miscellaneous	39	239	306	379	459	489	519	299	517	335	155	095	142	190	-011	023	080	288	225	216	173	016	135	172	055	174	214
	40	R-162	" Vocabulary II	40	279	368	450	559	553	606	294	589	355	150	066	130	167	-055	-028	046	349	261	247	186	-053	142	190	041	208	243
	41	R-172	Vocab Tot. (I & II)	41	322	421	505	631	622	683	348	668	393	150	071	132	188	-065	-031	040	381	272	270	194	-040	134	198	047	210	262
16	42	R-190	Info I Total	42	362	472	539	669	678	736	400	727	431	147	063	140	218	-070	-038	044	402	273	261	203	-041	122	199	048	209	280
	43	R-192	Info II Total	43	336	414	492	625	629	684	379	676	431	165	098	161	227	-052	-006	067	391	280	287	217	002	176	229	088	238	297
	44	R-100	Info Total (I & II)	44	363	465	538	672	680	738	404	730	443	158	077	151	228	-066	-028	053	410	283	278	214	-027	144	215	064	225	294
17	45	R-211	Memory for Sentences	45	113	136	154	227	215	241	110	235	237	084	048	084	143	001	015	040	192	114	101	104	015	048	036	-024	081	064
18	46	R-212	Memory for Words	46	213	228	304	376	424	440	248	437	341	136	103	120	229	037	038	063	246	149	203	148	022	098	115	017	125	178
19	47	R-220	Disguised Words	47	325	320	418	442	456	491	283	487	381	313	315	258	266	144	224	204	262	283	373	262	058	158	200	076	188	217
20	48	R-231	English:Spelling	48	263	218	325	445	482	509	304	508	447	166	118	100	271	-008	084	034	361	237	310	139	-008	138	180	042	179	178
21	49	R-232	" Capitalization	49	237	255	352	417	423	458	220	450	425	141	071	137	265	-058	-001	049	332	293	200	187	-002	115	116	011	123	125
22	50	R-233	" Punctuation	50	298	378	482	608	644	686	373	678	488	155	102	127	241	-050	008	035	399	264	265	188	-086	089	152	-014	141	167
23	51	R-234	" Usage	51	259	311	405	509	518	561	274	547	403	154	076	112	221	-050	016	025	357	267	249	179	-052	067	112	008	125	141
24	52	R-235	" Eff. Exp.	52	259	310	402	484	461	514	248	500	349	116	039	120	160	-088	-050	014	348	248	222	193	-109	070	097	-031	114	118
25	53	R-230	" Total	53	325	379	508	634	652	703	366	690	550	189	119	155	320	-064	007	043	461	324	315	229	-063	126	170	004	176	188
26	54	R-240	Word Functions	54	300	402	455	553	614	641	382	642	393	135	096	149	237	-015	018	078	319	201	227	189	-086	075	163	000	113	179
27	55	R-250	Reading Comprehension	55	357	453	542	632	626	686	356	671	428	160	093	164	217	-066	-017	058	398	287	300	208	-080	117	195	037	197	254
28	56	R-260	Creativity	56	358	459	542	506	483	538	286	528	306	161	078	183	156	-007	004	111	284	228	210	218	-035	085	153	028	142	216
29	57	R-270	Mechanical Reasoning	57	459	597	570	487	466	518	261	507	235	153	054	251	116	003	-013	160	223	207	179	289	-076	011	067	-005	087	156
30	58	R-261	Vis. in 2 Dimens	58		460	411	317	328	352	165	342	272	218	201	301	179	069	141	236	202	228	244	311	012	069	049	007	095	141
31	59	R-262	Vis. in 3 Dimens	59	460		538	428	439	474	235	464	227	149	074	264	099	-016	005	170	232	220	194	302	-098	-020	040	-035	043	119
32	60	R-290	Abstract Reasoning	60	411	538		431	504	544	270	523	314	179	098	251	135	-047	010	131	322	293	251	314	-120	029	085	-041	043	133
33	61	R-311	Math I	61	317	428	491		675	890	380	854	464	135	095	095	268	-041	-026	009	391	227	213	129	-095	025	127	007	149	180
34	62	R-312	Math II	62	328	439	504	675		937	479	918	510	149	085	114	316	-036	000	028	402	241	238	173	-093	093	147	001	146	200
35	63	R-320	Math I & II	63	352	474	544	890	937		476	971	534	156	078	115	322	-042	-012	021	433	256	248	182	-093	098	151	004	161	209
36	64	R-333	Math III	64	165	235	270	380	479	476		646	286	102	112	090	203	034	070	064	183	165	153	101	-040	033	113	003	075	136
37	65	R-340	Math Total(I+II+III)	65	342	464	529	854	918	971	646		526	157	097	123	326	-034	007	037	414	244	250	162	-089	091	157	012	156	212
42	66	R-410	Arith Computation	66	272	227	314	464	510	534	286	526			307	220	773	126	203	168	392	293	331	227		216	180	067	219	206
43	67	R-420	Table Reading	67	218	149	179	135	149	156	102	157	307		485	451	303	685	432	446	099	672	385	378	213	123	104	057	138	142
44	68	R-430	Clerical Checking	68	201	074	098	055	085	078	112	095	281	485		448	339	424	944	482	012	232	675	334	254	149	109	085	129	139
45	69	R-440	Object Inspection	69	301	264	251	095	114	115	090	123	220	451	448		212	272	400	885	078	341	354	916	143	106	079	061	123	112
46	70	A-410	Arith Computation	70	179	099	135	268	316	322	201	326	773	339	339	212		333	343	262	-052	077	183	132	223	166	139	103	144	155
47	71	A-420	Table Reading	71	069	-016	-047	-041	-036	-042	034	-028	126	685	424	272	333		471	429	-224	-079	130	090	278	078	049	047	047	076
48	72	A-430	Clerical Checking	72	141	005	010	-026	000	-012	070	007	203	432	944	400	343	471		486	-114	113	393	284	288	122	084	102	095	112
49	73	A-440	Object Inspection	73	236	170	131	000	028	021	064	037	168	446	482	885	262	429	486		-066	175	259	656	222	103	073	098	106	097
38	74	F-410	Arith Computation	74	202	232	322	391	402	433	183	414	593	099	012	078	-052	-224	-114	-066		364	289	193	-064	127	104	-030	160	127
39	75	F-420	Table Reading	75	228	220	293	227	241	256	105	250	293	672	232	341	077	-079	113	175	364		394	427	009	089	092	-016	140	117
40	76	F-430	Clerical Checking	76	244	194	251	213	238	248	153	250	331	385	675	354	281	130	393	259	289	394		378	062	138	114	006	145	138
41	77	F-440	Object Inspection	77	311	302	314	159	173	182	101	182	227	378	334	916	132	090	284	656	193	427	378		047	106	068	006	113	119
50	78	A-500	Preferences	78	012	-098	-120	-095	-078	-093	-040	-089	140	213	254	143	223	278	288	222	-064	009	062	047		169	115	249	115	146
51	79	R-601	BAI: Sociability	79	066	-020	029	085	093	098	033	091	216	123	149	106	166	078	122	103	127	089	138	080	169		513	293	525	455
52	80	R-602	" Soc.Sensitivity	80	069	040	085	127	147	151	113	157	180	104	129	079	139	049	084	073	104	032	114	069	115	513		273	487	579
53	81	R-603	" Impulsiveness	81	009	-035	-014	047	001	004	033	012	064	057	085	061	103	092	102	098	030	-016	006	006	249	293	273		265	200
54	82	R-604	" Vigor	82	095	043	093	149	146	161	075	156	219	138	122	123	144	047	095	106	160	140	145	113	115	525	487	265		477
55	83	R-605	" Calmness	83	141	119	131	180	200	209	136	212	206	142	139	112	155	076	112	097	127	117	138	097	146	455	579	200	477	
56	84	R-606	" Tidiness	84	098	056	097	140	155	162	084	158	232	126	173	129	170	051	136	111	137	120	176	120	141	433	544	192	451	536
57	85	R-607	" Culture	85	083	032	081	010	152	142	122	149	191	120	152	095	149	065	127	094	110	099	136	078	152	453	585	225	457	510
58	86	R-608	" Leadership	86	008	-014	007	043	080	070	073	079	108	111	149	076	136	118	151	091	-006	030	087	038	183	366	437	311	412	381
59	87	R-609	" Self-Confidence	87	111	090	112	151	184	186	090	178	181	113	096	085	126	029	057	065	123	124	139	083	086	357	296	123	284	430
60	88	R-610	" Mature Personality	88	090	090	108	180	208	214	135	215	262	133	160	111	201	065	129	104	156	116	156	090	156	450	613	262	545	601
	89	F-701	Int Inv: Phys Sci	89	-127	-229	-219	-243	-301	-301	-211	-307	-156	-078	-067	-063	-115	-020	-044	-046	-099	-087	-086	-064	-012	-093	-159	-027	-158	-182
	90	F-702	" Biol Sci & Med	90	-047	-079	-106	-113	-180	-145	-154	-175	-090	-047	-061	-061	-072	-014	-072	-056	-050	-078	-080	-050	-042	-133	-205	-066	-167	-182
	91	F-703	" Pub.Serv.	91	037	014	001	-030	-060	-051	-046	-050	-062	-050	-094	-017	-067	-033	-091	-024	-011	-035	-056	000	-069	-173	-168	-053	-097	-112
	92	F-704	" Lit-Ling.	92	036	003	-048	-056	-106	-092	-108	-102	-036	-043	-081	-004	-047	-042	-073	-013	006	-015	-040	-017	-026	-107	-189	-075	-089	-109
	93	F-705	" Soc.Serv.	93	050	046	020	019	-021	-004	-034	-009	-038	-047	-081	-004	-065	-050	-093	-038	024	-016	-010	010	-026	-143	-200	-024	-095	-114
	94	F-706	" Artistic	94	-035	-132	-091	-010	-036	-027	-038	-031	042	-029	-036	-072	-012	-021	-035	-071	052	-019	-020	-056	-028	-148	-140	-040	-029	-085
	95	F-707	" Musical	95	-038	-014	019	061	012	036	-027	024	099	001	-019	-027	032	-011	-030	-031	116	044	014	-008	004	009	-098	-029	031	-029
	96	F-708	" Sports	96	-061	-012	-070	-056	-067	-068	-036	-066	-168	-090	-112	-074	-091	-090	-103	-063	-091	-028	-003	-065	-110	-273	-147	-090	-307	-164
	97	F-709	" Outdr Rec.	97	-046	-003	-032	017	051	039	052	048	-017	-022	-006	-053	-014	-033	-006	-040	-020	-028	-003	-051	-071	-109	-145	-070	-158	-060
	98	F-710	" Bus.-Mgmt.	98	064	008	012	021	021	025	008	028	-030	-051	-042	-017	-028	007	-078	-017	012	-008	-014	-031	-050	-128	-124	-063	-043	-038
	99	F-711	" Sales	99	067	064	022	031	022	028	017	029	-016	-033	-068	002	-028	-027	-078	-017	012	-012	-001	-050	-024	-124	-151	-024	-099	-128
	100	F-712	" Computation	100	-031	-049	-064	-112	-139	-139	-078	-134	-142	-090	-090	-044	-123	-067	-087	-053	-065	-055	-055	-026	-056	-154	-151	-024	-099	-128
	101	F-713	" Office Work	101	080	064	085	098	109	114	048	113	057	-016	-029	022	006	-030	-066	019	101	042	066	032	-044	-029	-032	-017	014	007
	102	F-714	" Mech-Tech	102	022	-023	067	091	155	139	097	144	102	040	053	058	046	-019	015	025	102	075	117	076	-036	-005	044	004	-001	021
	103	F-715	" Skilled Trades	103	079	080	126	161	210	206	126	208	076	054	082	047	054	-020	057	042	051	091	100	043	001	015	032	007	-044	026
	104	F-716	" Farming	104	006	025	038	087	129	121	088	126	076	042	053	047	054	-020	057	042	051	091	100	043	001	015	032	007	-044	026
	105	F-717	" Labor	105	111	125	168	190	246	246	140	243	074	071	060	064	074	-035	005	053	190	133	159	093	-031	054	092	-028	074	110
	106	C-001	Composite: I.Q.Comp.	106	421	545	748	771	707	811	396	789	475	185	100	198	243	-065	-015	075	440	320	312	272	-109	103	178	021	187	242
	107	C-002	" Gen.Acad.Apt.	107	402	511	633	801	828	891	458	872	559	195	111	164	296	-064	001	051	463	332	327	237	-057	137	204	029	199	244
	108	C-003	" Verbal	108	349	426	550	685	703	758	402	746	532	194	118	164	296	-064	001	051	461	332	327	237	-057	137	204	029	204	236
	109	C-004	" Quantitative	109	349	477	574	801	829	891	458	880	521													160	211		158	224
	110	C-005	" Technical	110	392	540	538	596	574	637	331	626	298	113	009	156	130	-069	-072	063	306	226	188	213	-065	041	127	020	137	227
**	111	C-006	" Sci. Apt.	111	437	583	681	801	790	867	486	859	469	173	077	185	248	-057	-029	073	425	296	281	254	-094	087	176	022	180	259

Table V-2a (continued)

85

Column headers (diagonal labels, left to right): Tidiness, Culture, Leadership, Self-Confidence, Mature Personality, Phys Sciences, Biol Sci & Med, Public Service, Lit-Ling, Soc. Serv., Artistic, Musical, Sports, Outdr Rec., Bus.-Mgmt, Sales, Computation, Office Work, Mech-Tech, Skilled Trades, Farming, Labor, I.Q. Comp., Gen. Acad. Apt., Verbal, Quantitative, Technical, Sci. Apt.

84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	MEAN	S.D.	Code
077	081	021	100	104	-070	-063	-027	-034	-009	-002	015	-033	017	-031	-016	-030	042	070	077	061	094	335	364	363	363	239	340	10.4032	.5437	
																												1.0000	.0000	
200	175	055	225	205	-058	-045	-004	025	042	028	122	-104	-089	016	038	021	112	068	133	051	190	423	460	494	345	434	448	11.2321	1.4422	R-101
163	140	064	219	205	-225	-149	-025	-072	068	-026	052	-041	016	060	074	010	193	153	256	127	290	754	783	810	673	764	811	12.2019	3.9933	R-102
142	164	092	174	196	-202	-174	-082	-182	-006	-103	-019	-054	049	002	007	-024	158	223	248	162	279	691	720	780	636	608	715	11.4975	4.4382	R-103
173	193	112	171	192	-215	-185	-066	-167	-024	-113	-145	-056	067	-003	005	-049	107	165	206	140	247	599	628	639	562	562	639	5.5597	2.8860	R-104
150	148	064	199	208	-215	-146	-079	-116	017	-037	049	-089	013	013	034	-038	161	180	241	110	278	714	735	739	633	668	742	14.3184	5.3489	R-105
149	160	102	207	232	-345	-214	-068	-139	-022	-065	-020	-057	072	007	019	-132	118	134	208	151	254	706	786	703	866	666	807	8.4738	4.7099	R-106
114	112	040	177	174	-314	-195	-002	-055	042	-050	040	-032	008	083	078	-041	185	094	214	116	245	654	678	655	627	843	781	9.1236	3.4167	R-107
110	099	018	163	146	-240	-190	010	-059	060	-061	033	-034	-055	070	090	025	167	087	187	038	238	611	620	613	544	741	701	6.1216	2.4423	R-108
108	093	034	169	146	-168	-099	-012	-044	061	003	067	-065	-020	041	057	008	169	120	200	067	226	612	618	594	537	568	636	5.6110	1.9808	R-109
082	075	040	175	133	-273	-161	021	-039	088	-048	009	-037	-012	089	114	005	181	065	202	102	221	575	571	554	511	761	686	4.5849	2.3664	R-110
096	091	-002	182	167	-296	-125	056	038	088	-015	036	069	024	121	117	-006	163	-053	161	093	198	530	542	507	510	847	700	8.6430	4.1394	R-111
092	072	-025	183	140	-156	-032	094	119	160	036	138	006	-068	113	146	062	177	-074	118	-021	160	523	534	525	444	784	654	11.3857	3.4517	R-112
099	098	016	147	137	-105	-035	051	042	092	030	121	-068	-150	070	079	040	114	-002	101	-141	111	480	494	495	396	564	537	7.5280	2.4500	R-113
145	135	062	175	160	-146	-113	-032	-036	-001	-044	033	-025	-026	-008	009	-044	056	030	093	010	113	435	456	447	404	499	497	7.8903	2.8599	R-114
160	140	145	178	184	-162	-114	-091	-104	018	014	091	-320	-034	-056	-023	-074	113	131	152	072	194	557	584	585	513	451	558	7.6193	3.0512	R-115
181	176	103	190	191	-192	-164	-053	-131	018	-109	-018	-068	030	008	023	-011	157	179	229	148	280	625	641	661	538	568	646	5.7607	2.5159	R-131
116	126	060	165	168	-179	-118	-052	-089	036	-019	050	-054	009	010	033	-021	136	128	192	089	230	596	617	615	534	557	625	4.5028	1.8323	R-132
182	153	059	190	207	-179	-152	-015	-057	029	-035	037	-062	-010	029	044	-029	129	129	195	086	246	614	648	657	553	592	651	5.3282	2.1112	R-133
133	120	029	169	169	-169	-110	022	-007	065	-045	037	-051	-082	035	068	002	119	013	129	024	175	493	512	509	433	561	555	3.0210	1.2757	R-134
129	144	063	143	154	-151	-110	-063	-107	005	-090	-008	-043	015	-017	-003	-028	087	090	122	076	160	446	468	468	426	414	476	2.4782	1.3310	R-135
134	137	100	151	169	-175	-151	-089	-141	-022	-058	001	-085	050	-031	-015	-051	095	139	160	114	205	545	569	583	485	471	597	1.5577	.9784	R-136
117	097	054	147	142	-156	-121	-040	-087	037	-056	039	-047	031	033	052	010	160	172	220	126	252	564	577	592	484	523	583	2.6048	1.3219	R-137
104	106	094	149	152	-162	-130	-085	-133	-000	-049	003	-105	-007	020	006	-022	100	132	138	064	175	447	456	455	408	408	467	2.3335	1.4502	R-138
141	136	080	171	218	-192	-126	-093	-101	005	-053	021	-049	034	-031	-016	-064	117	117	159	098	222	584	592	580	533	517	604	4.2049	1.8735	R-139
188	152	058	204	189	-126	-097	-022	-020	036	-026	064	-085	-028	014	041	-011	136	103	162	086	238	536	550	537	441	487	546	2.8761	1.0336	R-140
167	168	126	151	190	-135	-124	-031	-071	004	-024	019	-059	014	-002	026	-064	043	106	136	094	196	411	452	447	414	376	443	1.3851	.8424	R-141
166	189	118	196	236	-180	-160	-184	-167	-083	-083	-040	-082	-016	010	026	-025	086	149	157	071	196	577	590	585	509	485	580	6.6371	3.2824	R-142
044	045	013	069	040	-093	-055	-027	-031	012	-057	-010	013	011	008	027	002	051	029	057	048	091	252	272	277	244	262	282	1.0783	.8568	R-143
085	077	039	102	098	-086	-050	-002	-013	023	040	023	-004	017	013	008	-040	066	077	104	048	116	330	353	326	339	279	348	.8200	.6948	R-144
-001	-001	003	067	036	-048	014	060	087	109	051	135	-058	-228	058	056	074	089	-104	-002	-173	001	179	171	170	117	292	224	2.0907	1.2187	R-145
038	029	048	074	080	-081	-053	018	027	071	022	082	-082	-235	050	031	037	059	-020	030	-101	029	242	233	227	184	318	283	1.6454	1.2250	R-146
186	145	073	226	208	-166	-116	-006	-013	053	-005	084	-099	-087	036	059	013	170	087	177	047	209	579	601	600	509	600	627	4.7275	1.9435	R-147
177	155	057	200	182	-116	-072	-003	-028	043	-023	024	-050	-003	021	047	-006	103	093	161	088	206	449	471	465	406	425	475	1.1930	.7560	R-148
137	145	094	204	179	-229	-149	-072	-089	017	-037	029	-118	-018	-012	-007	-071	086	090	142	102	192	466	491	477	460	424	497	2.4136	1.2243	R-149
153	148	062	172	182	-140	-112	-051	-116	010	-062	-011	-062	032	-001	016	-000	140	150	185	122	222	595	617	632	517	503	602	3.6451	1.6907	R-150
106	094	064	111	114	-111	-105	-054	-068	020	-052	-017	-016	065	-020	-026	-015	086	128	124	122	148	351	363	359	342	314	373	1.0913	.9631	R-151
157	151	097	194	203	-191	-135	-024	-072	-005	-023	040	-070	005	038	041	-034	137	146	202	132	249	588	622	629	544	562	628	4.6715	1.8627	R-152
188	163	082	196	215	-206	-152	-053	-105	023	-052	017	-061	010	008	029	-028	155	157	213	103	270	710	741	768	614	643	731	5.4062	2.3407	R-162
185	160	076	226	224	-234	-162	-038	-090	055	-046	042	-052	015	044	062	-004	193	166	258	127	304	793	824	854	700	773	840	17.6081	5.8955	R-172
177	172	076	247	242	-298	-188	-028	-084	053	-048	047	-076	-003	055	073	-013	197	129	255	112	305	821	855	847	772	898	919	131.7910	36.9189	R-190
214	206	113	258	268	-246	-185	-064	-122	029	-071	034	-104	-029	012	039	-025	177	165	240	112	303	794	821	822	708	746	835	66.0400	20.6570	R-192
175	189	092	258	258	-288	-193	-042	-100	046	-057	044	-088	-012	041	063	-030	195	145	257	115	313	835	867	862	771	870	915	197.8100	56.0050	R-193
054	041	-013	079	055	-084	-068	-009	-012	-008	004	048	-046	-052	063	003	-032	026	028	055	-012	080	253	285	274	227	205	259	8.7533	3.0774	R-211
115	109	060	127	136	-161	-124	-066	-139	-067	-064	-016	-087	011	-036	-013	-170	034	106	118	077	139	449	490	468	452	329	450	10.4183	4.9862	R-212
201	171	126	194	207	-141	-116	-038	-119	-007	-060	-022	-071	007	011	026	-012	103	155	183	121	214	608	637	641	511	481	599	13.6303	6.6701	R-220
201	160	090	149	220	-151	-115	-105	-128	-062	-019	014	-105	029	-029	-021	-070	045	132	133	088	169	532	558	711	524	367	522	8.1705	3.0513	R-231
141	110	017	119	112	-086	-042	001	004	020	011	068	-071	-011	027	034	-018	090	110	149	067	170	475	609	679	442	386	478	28.2342	4.8941	R-232
165	138	052	155	189	-205	-133	-026	-096	-023	-034	004	-052	037	005	003	-097	083	153	191	107	232	689	814	830	688	530	698	16.1746	4.5580	R-233
130	109	036	148	138	-137	-089	019	-049	024	-015	043	-033	011	055	043	-013	128	134	148	099	213	604	724	775	555	499	601	15.6508	3.5685	R-234
112	066	013	120	112	-113	-076	013	-049	014	-011	047	-067	009	034	025	-018	125	149	180	072	206	587	663	687	502	436	566	7.8390	2.5894	R-235
195	153	054	179	199	-181	-119	-018	-082	-010	-019	043	-085	015	020	020	-061	118	171	216	111	255	740	893	949	698	571	738	76.0600	14.5685	R-236
141	132	076	140	204	-256	-170	-060	-143	-060	-072	-038	-060	049	-012	-006	-117	060	146	178	120	208	658	701	638	665	500	669	8.8885	5.0765	R-240
175	153	071	224	220	-227	-163	-057	-137	012	-053	011	-099	-024	014	040	-032	161	167	225	093	261	938	881	799	693	681	866	27.4446	11.1987	R-250
146	136	061	170	188	-215	-143	-018	-083	010	-093	-008	-029	-022	021	052	-035	120	060	147	045	197	659	673	596	544	618	722	8.4240	1.9424	R-260
071	050	-010	133	101	-237	-095	064	045	090	-060	054	-020	-071	080	096	-003	124	-053	141	010	149	616	586	516	521	785	718	11.9265	4.1248	R-270
098	083	008	111	090	-127	-047	037	036	050	-035	038	-061	-046	041	067	-031	080	022	079	008	111	421	462	349	349	392	437	13.3315	5.8047	R-281
056	032	-014	090	090	-229	-079	041	003	046	-012	-014	021	-003	048	064	-069	064	-023	081	025	115	545	511	426	477	540	583	8.5885	3.3742	R-282
097	081	007	112	108	-213	-106	001	-048	020	-091	019	-070	-032	012	022	-064	085	067	126	038	168	748	633	550	544	538	681	8.6460	3.0781	R-290
140	160	043	151	180	-241	-113	-030	-106	019	-010	061	-056	017	006	031	-012	098	161	187	199		791	801	685	817	596	861	8.0961	3.5268	R-311
155	152	080	184	208	-301	-180	-060	-106	-021	-036	012	-067	051	021	022	-139	109	155	210	129	246	707	828	703	929	574	790	10.2354	4.5899	R-312
162	142	070	186	214	-301	-165	-051	-092	-004	-027	036	-068	039	016	028	-139	114	016	128	121	246	811	891	758	961	637	867	18.3400	7.4392	R-320
084	122	073	090	135	-211	-154	-046	-108	-034	-038	-027	-036	052	008	017	-078	048	097	126	088	140	396	458	402	655	331	486	2.9443	2.0171	R-333
158	149	079	178	215	-307	-175	-050	-102	-003	-031	024	-066	048	018	029	-134	113	144	224	126	244	789	832	746	980	626	859	21.2800	8.6302	R-340
232	191	108	181	262	-156	-090	-062	-036	-038	042	099	-168	-017	-030	-016	-142	057	102	136	076	179	475	559	532	524	298	469	35.4616	9.9442	R-410
126	120	111	113	133	-078	-067	-050	043	-047	029	001	-091	-022	051	-033	-090	-016	040	035	054	071	185	195	194	163	113	173	11.3860	8.1527	R-420
173	152	154	096	160	-067	-087	-094	-081	-085	-016	-019	-112	-006	-083	-068	020	-029	053	011	082	060	100	111	118	099	009	071	34.7966	14.9615	R-430
129	095	076	085	111	-063	-061	-017	-004	-013	-072	-027	-074	-053	-017	002	-044	022	058	056	047	104	198	174	164	125	156	185	21.8452	7.6666	R-440
179	149	136	136	201	-115	-072	-067	047	-065	012	032	-136	-014	-038	-028	-123	008	046	064	054	074	243	315	296	325	130	248	39.5058	10.7128	A-410
051	065	118	029	065	-020	-014	-033	042	-050	021	-041	-033	-003	-047	-037	-067	-003	-019	-042	020	-035	-065	-060	-064	-022	-069	-057	15.7240	12.1183	A-420
136	127	151	057	129	-044	-072	-091	-073	-097	-035	-030	-049	-005	-047	-078	-087	-066	015	-033	057	005	-015	-006	001	009	-072	-029	39.6890	16.0224	A-430
111	094	091	065	104	-046	-076	-024	-013	-034	-071	-031	-063	-040	-031	-017	-053	-016	025	031	042	053	075	056	051	039	063	073	23.6697	8.8936	A-440
137	110	-006	210	156	-099	-050	-011	006	024	-021	116	-091	-009	003	012	-065	101	102	134	051	190	440	481	463	413	306	425	23.3018	25.2682	F-410
120	099	030	124	116	-087	-078	-035	-015	-014	-019	044	-090	-028	-022	-008	-065	042	075	091	053	133	320	329	332	246	226	296	7.0409	11.9186	F-420
176	136	087	139	156	-086	-080	-056	-060	-016	-020	014	-103	-003	-034	-014	-055	046	117	105	100	159	312	324	327	255	188	281	20.0958	21.5036	F-430
120	078	038	083	090	-064	-050	000	011	010	-056	-008	-065	-051	-000	021	-026	054	076	084	043	133	272	249	237	182	213	254	19.9354	9.0514	F-440
141	152	183	088	148	-012	-042	-069	-026	-065	-024	004	-110	-071	-063	-050	-056	-044	-036	-032	001	-055	-109	-088	-057	-089	-065	-094	58.6588	26.7839	A-500
433	453	366	357	450	-093	-133	-173	-107	-143	-048	009	-273	-109	-200	-128	-124	-029	-005	-005	015	054	103	124	137	087	041	087	5.9342	2.9112	R-601
544	585	437	296	613	-129	-205	-168	-189	-200	-140	-098	-147	-048	-163	-100	-151	-032	044	037	032	092	178	195	204	166	127	116	3.7969	2.2163	R-602
192	225	311	123	262	-027	-066	-056	-075	-024	-040	-029	-090	-063	-076	-063	-024	-017	004	-024	007	-028	021	018	029	016	020	022	1.8482	1.5747	R-603
451	457	412	284	545	-156	-167	-097	-089	-095	-029	031	-307	-158	-212	-043	-026	-014	-001	025	044	074	187	199	204	158	137	180	3.5491	2.0845	R-604
536	510	381	430	601	-182	-182	-112	-109	-114	-085	-029	-164	-060	-100	-038	-128	007	021	053	026	110	242	249	236	224	227	259	3.7421	2.4081	R-605
592	552	350	319	636	-125	-170	-102	-107	-132	-098	-055	-120	-041	-110	-063	-138	-015	057	069	042	130	172	200	204	164	117	169	4.8945	2.7073	R-606
	404	321	592		-171	-238	-184	-125	-214	-187	-168	-144	-016	-160	-104	-166	-067	037	-009	038	043	144	171	175	162	103	151	4.3688	2.5553	R-607
350	404		242	464	-144	-195	-191	-195	-174	-113	-091	-158	-040	-166	-117	-162	-067	037	-009	038	043	057	075	074	089	010	057	1.1639	1.2776	R-608
319	321	242		395	-092	-098	-055	-103	-052	-003	026	-077	-039	-030	017	-028	082	061	102	085	144	210	224	211	196	210	228	4.8485	2.3519	R-609
636	592	464	395		-208	-220	-147	-137	-167	-086	-042	-144	-045	-115	-050	-173	-027	012	057	012	117	214	241	228	230	180	230	10.1556	5.1398	R-610
-125	-171	-144	-092	-208		714	413	514	478	466	299	384	198	423	329	631	434	331	330	148		-266	-259	-220	-333	-318	-332	48.4162	12.7466	F-701
-170	-238	-195	-098	-220	714		462	571	531	461	352	364	177	434	356	494	309	237	256	108	100	-161	-175	-155	-198	-161	-189	25.1811	7.0568	F-702
-102	-184	-191	-055	-147	413	462		616	521	510	309	351	137	650	545	122	181	-043	-045	-038	-062	054	-017	035.9386	12.2761		F-703
-107	-225	-195	-033	-147	514	571	616		669	633	554	415	148	650	585	554	500	221	429	189	288	-113	-117	-113	-120	018	-079	53.6084	11.6274	F-704
-132	-214	-174	-052	-167	478	531	521	669		486	412	395	167	611	533	608	557	333	487	250	364	018	001	007	-017	111	043	40.5447	8.1520	F-705
-098	-187	-113	-003	-086	466	461	410	633	486		501	268	153	500	428	424	412	313	428	203	279	-062	-047	-045	-033	-033	-059	23.7507	0.0207	F-706
-055	-168	-091	026	-042	299	352	309	554	412	501			133	008	340	307	300	155	273	078	275	018	030	035	012	067	038	18.2683	4.9175	F-707
-120	-144	-158	-077	-144	384	364	351	415	395	268	133		514	434	307	339	282	327	372	352	274	-096	-089	-080	-068	-004	-061	19.4689	8.8782	F-708
-041	-019	-040	-039	-045	198	177	137	148	167	153	008	514		250	155	109	165	347	535	280	019	-014	024	056	-034	-006		1.1536	3.0035	F-709
-118	-160	-166	-030	-145	423	434	654	650	611	500	340	434	250		706	642	596	396	598	278	432	014	020	025	015	118	054	44.2241	9.8764	F-710
-063	-104	-117	-017	-050	309	356	509	585	533	428	307	317	155	706		581	591	333	540	238	409	039	035	030	027	133	075	20.2200	5.0463	F-711
-138	-166	-162	-028	-173	616	494	554	554	608	424	339	339	177	642	581		656	367	474	187	333	-067	-088	-046	-043	006	-060	33.9131	7.2180	F-712
-015	-036	-067	082	-021	349	309	394	500	557	412	350	282	160	596	591	656		509	685	324	611	150	150	159	116	200	174	22.2078	5.2301	F-713
057	080	037	102	012	431	327	441	554	221	333	313	155	321	365	396	033	367	509		782	522	567	147	174	200	150	002	161	48.1328	11.3588	F-714
069	046	-009	102	012	330	256	345	429	487	428	273	372	347	596	540	474	685	782			562	789	217	244	258	218	199	232	46.5016	11.1866	F-715
042	046	008	150	012	250	188	122	189	250	203	078	352	535	278	238	187	324	522	562			502	091	124	138	130	065	100	30.9787	6.7080	F-716
130	111	043	144	012	173	100	181	288	364	279	215	274	200	432	404	333	611	657	789	502		261	291	302	259	247	282	38.8168	6.3689	F-717
172	144	057	210	224	-266	-161	-043	-113	018	-052	028	-096	-019	010	-069	019	020	035	-088	150	147	217	091	261		935	830	797	730	939	158.0080	54.1935	C-001
204	171	057	211	228	-279	-175	-045	-117	001	-047	030	-089	014	020	035	-088	150	174	244	124	291	935		944	888	735	942	471.2179	123.3249	C-002
164	175	091	220	211	-220	-155	-038	-113	007	-045	035	-080	024	025	030	-045	159	200	218	138	302	830	944		767	697	846	165.5627	22.3211	C-003
164	162	089	196	230	-333	-178	-062	-120	-017	-043	012	-068	056	015	027	-143	116	150	218	138	259	797	888	767		659	881	93.9543	39.1502	C-004
117	103	010	210	180	-318	-161	054	018	111	-039	067	-004	-034	118	133	006	200	002	199	065	247	730	735	697	659		886	51.7854	16.3840	C-005
169	151	057	228	230	-332	-189	-017	-079	043	-059	038	-061	-006	054	075	-068	174	106	232	102	282	939	942	846	881	886		432.5903	137.4748	C-006

Note: Decimal points have been omitted from the correlation coefficients.

Table V-2 (continued)

Table V-2b. All 15-year-old boys not in high school (N=283)

Column headers (diagonal), numbered 1–25:

1 Grade · 2 Sex (1=M, 2=F) · 3 Screening · 4 Vocab I · 5 Literature · 6 Music · 7 Soc. Stud. · 8 Math · 9 Phys. Sci · 10 Bio. Sci · 11 Sci Attitude · 12 Aero & Space · 13 Elec & Electron · 14 Mechanical · 15 Farming · 16 Home Ec · 17 Sports · 18 Art · 19 Law · 20 Health · 21 Engineering · 22 Architecture · 23 Journalism · 24 Foreign Travel · 25 Military

Var*	Var	Code	Description	#	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	1		Grade	1	255	168	076	057	193	030	161	198	158	138	148	210	233	181	176	106	172	188	129	088	025	145	-024
	2		Sex (1=M,2=F)	2																							
1	3	R-101	Info I: Screening	3		445	407	253	528	342	401	422	430	269	442	517	531	478	421	371	325	347	405	222	186	217	154
2	4	R-102	" Vocab I	4	445		584	416	648	450	640	489	561	562	609	633	675	477	509	491	359	554	394	248	194	362	263
3	5	R-103	" Literature	5	407	584		418	597	450	483	450	459	478	509	476	516	342	-531	526	338	484	393	364	307	361	357
4	6	R-104	" Music	6	253	416	418		469	401	361	290	223	380	377	328	330	296	435	361	233	417	236	196	174	315	224
5	7	R-105	" Soc. Studies	7	528	648	597	469		463	592	530	489	496	512	517	539	495	537	557	463	588	406	283	263	412	330
6	8	R-106	" Math	8	342	450	450	401	463		436	306	300	352	475	363	328	367	379	340	273	369	318	133	219	217	269
7	9	R-107	" Phys. Sci	9	401	640	483	361	592	436		471	436	480	532	484	510	473	425	498	347	433	340	200	241	352	276
8	10	R-108	" Bio. Sci	10	422	489	450	290	530	306	471		419	370	456	490	505	353	377	439	319	398	364	168	105	240	247
9	11	R-109	" Sci Attitude	11	430	561	459	223	489	300	436	419		370	485	511	516	434	476	371	349	375	361	227	223	235	167
10	12	R-110	" Aero & Space	12	269	562	478	380	496	352	480	320	370		426	449	356	359	443	324	274	363	305	245	280	243	220
11	13	R-111	" Elec & Electron	13	442	609	509	377	512	475	532	456	485	426		577	560	448	411	315	390	373	187	195	299	207
12	14	R-112	" Mechanical	14	517	633	476	328	517	363	484	490	511	449	577		678	521	473	367	277	390	376	263	244	352	174
13	15	R-113	" Farming	15	531	675	516	330	539	328	510	505	516	350	577	678		487	494	461	318	449	411	215	185	351	210
14	16	R-114	" Home Ec	16	478	477	392	296	495	367	473	353	434	359	460	521	487		444	345	330	393	329	134	177	360	206
15	17	R-115	" Sports	17	421	509	531	435	537	379	425	377	476	443	448	473	494	444		428	337	481	371	260	280	272	298
	18	R-131	Info II: Art	18	371	491	526	361	557	340	498	439	371	324	411	367	461	345	428		443	465	421	187	194	414	222
	19	R-132	" Law	19	325	359	338	233	463	273	347	319	349	274	315	277	318	330	337	443		421	347	192	148	348	261
	20	R-133	" Health	20	347	554	484	417	588	369	433	398	375	363	390	390	449	393	481	465	421		380	163	258	334	216
	21	R-134	" Engineering	21	405	394	393	236	406	318	340	364	361	305	373	376	411	329	371	421	347	380		162	168	225	227
	22	R-135	" Architecture	22	222	248	364	196	283	133	200	168	227	245	187	263	215	134	260	187	192	163	162		200	169	178
	23	R-136	" Journalism	23	186	194	307	174	263	219	246	105	223	280	195	244	185	177	280	194	148	258	168	200		243	132
	24	R-137	" Foreign Travel	24	217	362	361	315	412	217	352	240	235	243	299	352	351	360	272	414	348	334	225	169	243		193
	25	R-138	" Military	25	154	263	357	224	330	269	276	247	157	226	207	174	210	206	298	222	261	216	227	178	132	193	
	26	R-139	" Acct,Bus,Sales	26	323	475	429	250	447	323	338	344	351	320	422	480	445	392	329	443	386	346	334	257	199	102	201
	27	R-140	" Pract.Knowl.	27	424	493	415	322	533	337	435	372	449	345	404	454	441	382	493	503	450	501	393	199	217	322	146
	28	R-141	" Clerical	28	210	233	251	210	307	216	305	232	254	195	228	232	270	296	211	308	279	151	211	138	098	191	151
	29	R-142	" Bible	29	265	275	348	217	402	310	355	314	251	235	259	303	298	246	243	322	266	364	314	176	174	182	207
	30	R-143	" Colors	30	225	155	188	216	199	182	122	200	185	112	117	203	138	101	105	162	154	092	178	100	106	073	089
	31	R-144	" Etiquette	31	191	214	139	026	195	143	130	152	127	099	208	232	174	105	176	130	055	140	174	062	043	061	231
	32	R-145	" Hunting	32	215	289	247	047	259	064	204	201	271	230	165	321	394	225	285	168	213	197	202	151	116	138	150
	33	R-146	" Fishing	33	278	270	211	101	253	178	289	287	233	205	239	286	292	220	226	252	215	203	192	118	129	133	159
	34	R-147	" Outdr Act(Other)	34	427	528	446	335	502	276	468	312	450	102	399	451	480	393	432	472	397	495	337	266	326	354	150
	35	R-148	" Photography	35	193	358	312	209	295	226	251	205	287	234	112	297	255	279	340	265	219	312	218	121	245	241	110
	36	R-149	" Games	36	316	564	356	325	371	267	270	261	342	226	353	388	351	310	321	300	313	360	246	140	194	243	126
	37	R-150	" Theater,ballet	37	323	346	461	344	445	332	358	317	317	311	393	344	272	339	340	465	320	406	324	150	284	346	222
	38	R-151	" Foods	38	031	086	073	127	117	113	076	071	-003	032	C83	114	062	095	003	151	083	120	045	056	046	092	065
	39	R-152	" Miscellaneous	39	285	423	360	314	437	318	389	331	299	278	349	371	307	261	343	393	297	460	370	182	240	300	228
	40	R-162	" Vocabulary II	40	395	488	457	375	553	366	430	414	413	432	427	485	441	332	421	537	445	499	419	224	384	476	146
16	41	R-172	Vocab Tot. (I & II)	41	488	939	616	458	702	480	647	528	582	590	623	664	678	487	546	578	444	610	460	273	296	458	254
	42	R-190	Info I Total	42	663	835	740	548	818	548	735	646	665	621	742	771	769	670	692	601	464	615	510	320	309	443	342
	43	R-191	Info II Total	43	531	661	667	467	733	483	605	533	548	483	560	606	616	533	588	723	636	699	581	380	396	529	424
	44	R-100	Info Total (I & II)	44	646	811	746	543	823	584	722	634	653	600	712	747	749	651	685	667	541	669	555	354	351	490	384
17	45	R-211	Memory for Sentences	45	367	423	358	144	387	214	310	366	415	281	360	313	375	292	316	285	352	333	229	213	115	142	129
18	46	R-212	Memory for Words	46	291	423	323	124	329	224	356	341	266	236	264	239	283	172	225	279	266	371	208	183	022	147	061
19	47	R-220	Disguised Words	47	286	636	438	287	424	311	403	314	379	352	390	399	390	342	379	386	248	412	261	220	194	291	164
20	48	R-231	English:Spelling	48	368	380	266	301	383	254	284	346	311	158	281	257	362	287	406	269	181	361	199	160	065	134	072
21	49	R-232	" Capitalization	49	415	382	384	305	424	245	327	397	399	273	363	333	403	301	423	341	254	360	270	221	092	272	181
22	50	R-233	" Punctuation	50	329	465	342	243	453	309	375	460	392	306	390	343	390	250	291	294	271	398	256	132	060	169	195
23	51	R-234	" Usage	51	506	438	453	266	474	280	404	405	473	303	422	417	467	300	419	424	361	391	309	240	102	248	183
24	52	R-235	" Eff. Exp.	52	252	321	288	200	356	152	239	262	363	223	255	304	302	233	308	248	341	362	225	157	108	199	136
25	53	R-230	" Total	53	488	510	455	356	535	328	419	488	498	322	438	417	492	349	413	418	349	466	322	233	093	268	246
26	54	R-240	Word Functions	54	072	146	067	048	271	005	177	113	130	167	112	138	160	152	114	092	139	057	085	-013	056	181	100
27	55	R-250	Reading Comprehension	55	418	613	504	281	614	315	488	467	460	396	440	492	509	364	466	467	379	579	326	219	233	378	297
28	56	R-260	Creativity	56	235	465	441	261	401	323	423	342	356	333	378	452	402	303	344	381	212	408	247	207	247	358	155
29	57	R-270	Mechanical Reasoning	57	267	515	346	203	372	237	413	403	450	355	445	449	387	295	296	292	200	243	200	058	100	303	093
30	58	R-281	Vis. in 2 Dimens	58	101	256	230	054	180	130	136	168	205	080	711	212	214	136	103	180	114	118	177	004	023	196	055
31	59	R-282	Vis. in 3 Dimens	59	080	270	223	084	143	054	207	214	275	188	179	234	191	060	153	167	122	169	060	009	074	175	002
32	60	R-290	Abstract Reasoning	60	221	375	271	148	385	153	294	324	368	277	309	267	229	164	307	261	230	284	240	108	179	208	073
33	61	R-311	Math I	61	275	433	265	199	440	277	370	328	331	349	352	327	374	281	348	295	307	286	261	130	121	185	153
34	62	R-312	Math II	62	187	319	266	248	334	229	266	272	240	177	203	234	264	293	208	242	266	310	259	179	003	183	183
35	63	R-320	Math I & II	63	287	468	332	280	481	315	395	374	312	325	344	350	397	358	345	334	357	373	324	194	076	217	214
36	64	R-333	Math III	64	-039	001	026	020	002	052	-042	032	067	-035	048	-027	018	047	-094	-022	-081	014	003	-014	-043	-039	-005
37	65	R-340	Math Total(I+II+III)	65	237	412	303	255	425	298	332	342	372	272	322	297	356	334	266	286	283	334	287	165	030	176	187
42	66	R-410	Arith Computation	66	496	438	289	284	421	310	342	309	220	307	373	432	325	313	258	311	388	307	188	062	214	160
43	67	R-420	Table Reading	67	122	168	104	163	147	197	121	057	094	079	126	136	208	146	096	077	120	073	175	042	038	114	081
44	68	R-430	Clerical Checking	68	047	-046	091	077	003	076	-002	-047	-046	-027	-024	-012	056	101	090	-082	-018	-080	-021	011	-054	009	081
45	69	R-440	Object Inspection	69	147	137	105	084	101	040	124	037	153	075	066	092	132	170	168	040	059	085	023	-012	073	137	-007
46	70	A-410	Arith Computation	70	171	132	049	120	105	191	161	098	068	043	154	165	192	194	162	047	172	135	150	089	015	111	174
47	71	A-420	Table Reading	71	-035	-080	-100	-024	-089	024	-015	-129	-105	-074	-045	-005	014	040	-062	-070	-093	-129	-064	019	-017	074	096
48	72	A-430	Clerical Checking	72	-068	-116	-053	002	-135	004	-067	-154	-127	-126	-073	-075	-020	044	-066	-152	-102	-161	-042	-020	-077	-031	020
49	73	A-440	Object Inspection	73	039	-036	-040	041	-033	042	031	-086	068	-070	-067	-021	023	127	067	-059	001	-015	-088	-058	015	074	095
38	74	F-410	Arith Computation	74	332	316	256	162	330	024	141	254	188	147	202	236	117	207	224	130	258	152	097	049	098	-138
39	75	F-420	Table Reading	75	140	234	209	157	228	120	113	212	209	157	155	112	142	060	154	151	214	223	218	007	052	-009	-062
40	76	F-430	Clerical Checking	76	221	223	289	159	278	054	131	257	164	199	099	129	154	112	232	142	169	164	123	064	047	080	131
41	77	F-440	Object Inspection	77	169	216	175	082	165	021	144	122	201	159	145	143	161	129	175	102	080	127	103	031	088	127	-079
50	78	A-500	Preferences	78	195	129	153	109	132	248	180	002	101	062	119	169	221	245	243	139	070	086	204	122	052	057	190
51	79	R-601	SAI: Sociability	79	297	284	217	244	316	322	262	263	211	288	298	343	361	323	324	252	216	270	225	166	055	112	153
52	80	R-602	" Soc.Sensitivity	80	221	197	092	290	188	216	169	147	105	185	221	290	277	282	182	096	110	159	179	129	025	120	196
53	81	R-603	" Impulsiveness	81	123	120	075	179	089	203	099	095	057	107	093	141	149	212	116	096	047	058	065	037	070	074	121
54	82	R-604	" Vigor	82	234	284	181	301	272	247	223	181	178	285	280	366	328	345	324	227	205	190	224	120	061	157	197
55	83	R-605	" Calmness	83	275	214	157	207	242	347	182	129	129	177	260	273	273	314	224	183	181	157	260	126	-027	123	184
56	84	R-606	" Tidiness	84	187	183	178	265	225	304	218	132	052	261	254	279	202	244	185	158	158	195	157	121	067	124	241
57	85	R-607	" Culture	85	307	213	158	216	236	285	219	154	131	248	240	344	258	280	248	216	164	152	214	164	038	100	149
58	86	R-608	" Leadership	86	-074	-109	-118	105	-022	097	-015	-048	-127	032	006	-022	-043	028	027	-035	019	-004	080	-027	-021	061	146
59	87	R-609	" Self-Confidence	87	319	267	252	134	245	247	248	219	001	160	226	262	290	266	264	231	160	168	238	145	092	111	129
60	88	R-610	" Mature Personality	88	253	148	092	238	195	329	150	167	065	146	216	258	241	257	156	157	094	128	246	102	-034	095	196
	89	F-701	Int Inv: Phys Sci	89	003	081	083	017	-053	-031	-029	-036	086	066	-037	007	017	-028	-039	-034	-179	-087	-093	-046	-016	029	-202
	90	F-702	" Biol Sci & Med	90	035	081	082	-030	-044	-119	-043	-033	113	068	022	080	076	-054	-044	003	-125	-072	-083	-018	-096	069	-104
	91	F-703	" Pub Serv.	91	056	159	081	016	057	-009	089	008	086	186	105	083	094	-001	000	043	-052	044	014	-017	048	144	-164
	92	F-704	" Lit-Ling.	92	113	186	095	-026	-017	-059	060	174	111	065	138	130	019	-005	036	-076	-014	-018	-022	021	173	-088
	93	F-705	" Soc.Serv.	93	089	199	180	083	083	086	072	191	197	111	195	100	195	146	046	030	109	-030	007	039	019	022	185	-010
	94	F-706	" Artistic	94	134	153	075	058	036	-002	041	-006	145	126	065	122	126	012	068	-080	-039	015	-047	015	-034	044	-027
	95	F-707	" Musical	95	142	277	234	052	159	093	141	111	222	156	159	196	211	089	189	073	136	029	-052	053	148	-008
	96	F-708	" Sports	96	-070	-020	-035	-104	-112	-112	030	-130	-012	-065	-099	-094	-068	-093	-213	-041	-237	-141	-164	-072	-047	009	-048
	97	F-709	" Outdr Rec.	97	-132	-120	-093	-125	-161	-075	-103	-147	-135	-082	-121	-167	-194	-163	-124	-257	-276	-165	-075	-049	-088	-049
	98	F-710	" Bus.-Mgmt.	98	042	173	108	058	066	081	083	003	067	142	110	033	006	067	-104	047	-024	-075	-003	135	-062
	99	F-711	" Sales	99	076	175	202	103	152	016	130	094	179	128	183	147	064	042	062	-125	027	C05	-004	069	141	-035
	100	F-712	" Computation	100	123	240	203	162	156	017	111	129	147	204	123	185	172	160	122	-033	052	013	028	055	175	-034
	101	F-713	" Office Work	101	123	294	233	147	218	050	225	113	242	261	138	192	195	172	166	168	058	125	054	-005	066	254	-018
	102	F-714	" Mech-Tech	102	-005	087	148	091	064	-031	071	012	091	093	009	-031	009	-019	037	088	-050	-029	-037	039	024	079	040
	103	F-715	" Skilled Trades	103	140	262	244	096	183	063	177	104	263	276	-121	200	177	121	130	149	025	043	080	007	097	176	930
	104	F-716	" Farming	104	027	063	029	062	-049	064	006	072	097	023	007	-060	-011	005	-006	-129	-038	062	018	031	040	-008
	105	F-717	" Labor	105	165	302	249	151	281	092	223	127	271	269	179	278	246	241	208	209	068	135	117	106	087	263	010
106	C-001		Composite: I.Q.Comp.	106	413	633	483	281	640	323	509	498	528	441	482	490	534	464	401	538	361	209	245	360	306
107	C-002		" Gen.Acad.Apt.	107	521	681	565	408	683	446	556	568	582	448	541	543	593	446	556	522	442	594	412	274	186	371	306
108	C-003		" Verbal	108	544	688	635	438	657	426	638	560	581	547	551	539	606	435	565	528	417	566	408	294	183	362	299
109	C-004		" Quantitative	109	284	464	378	326	479	509	389	372	391	313	392	342	385	386	313	329	304	386	330	180	069	204	731
110	C-005		" Technical	110	525	777	604	423	666	478	754	682	611	632	773	805	684	556	545	515	379	487	430	241	255	413	248
**	111	C-006	" Sci. Apt.	111	496	765	602	404	717	493	679	631	619	570	671	685	640	513	559	539	431	575	443	257	260	419	284

Table V-2b (continued)

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	Acct, Bus, Sales	Pract. Knowl.	Clerical	Bible	Colors	Etiquette	Hunting	Fishing	Outdr Act (Other)	Photography	Games	Theater, Ballet	Foods	Miscellaneous	Vocabulary II	Voc. Tot. (I & II)	Info I Total	Info II Total	Info Total (I & II)	Mem. for Sentences	Mem. for Words	Disguised Words	Spelling	Capitalization	Punctuation	Usage	Eff. Exp.	Eng. Total	Word Functions	Reading Comp.	Creativity	Mech. Reasoning	Code
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	
	152	148	100	070	042	036	056	099	097	060	063	127	-006	071	108	168	229	182	222	174	057	167	119	183	144	190	067	194	046	065	114	155	
	323	424	210	265	225	191	215	278	427	193	316	323	031	285	395	488	663	531	646	367	297	286	368	415	329	506	252	488	072	418	235	267	R-101
	475	493	233	275	155	214	289	270	528	358	364	346	086	423	488	939	835	661	811	423	423	536	380	382	465	438	321	510	146	613	465	515	R-102
	429	415	251	348	188	139	247	211	446	312	356	461	073	360	457	616	740	667	746	358	323	438	266	384	342	453	288	455	067	504	441	346	R-103
	250	322	210	217	216	026	047	101	335	209	325	344	127	314	375	458	548	467	543	144	224	287	301	305	243	266	200	356	048	281	261	209	R-104
	447	533	307	402	199	195	259	253	502	295	371	445	117	437	553	702	818	733	823	387	329	424	383	424	453	474	356	535	221	614	401	372	R-105
	323	337	216	310	182	143	064	178	276	226	267	332	113	318	366	480	598	483	584	214	224	311	254	245	307	280	152	328	095	315	323	237	R-106
	338	435	305	355	122	130	209	289	468	251	270	358	076	389	430	647	735	605	722	310	356	403	284	327	375	404	239	419	177	488	423	413	R-107
	344	372	232	314	200	152	201	287	312	205	261	317	071	331	414	528	646	533	634	366	341	314	346	399	460	405	262	488	113	467	342	403	R-108
	351	449	254	251	185	127	271	233	450	287	342	317	-003	294	413	982	665	548	653	415	266	379	311	399	392	473	363	498	130	460	356	450	R-109
	320	345	195	235	112	049	230	205	302	234	266	311	032	278	432	590	621	483	600	281	236	352	158	273	306	303	223	322	162	396	331	355	R-110
	422	404	228	259	117	208	165	239	399	312	393	393	083	149	427	623	742	560	712	360	264	390	281	363	390	422	255	438	112	440	378	445	R-111
	480	454	232	303	208	232	321	286	451	297	388	349	114	371	485	664	771	667	747	313	239	399	257	333	343	417	304	417	138	492	452	449	R-112
	445	441	270	248	138	174	394	292	480	255	351	272	062	307	441	678	769	616	749	375	283	390	362	403	390	467	102	492	160	509	402	387	R-113
	392	382	296	246	101	105	225	220	393	279	310	339	095	261	332	487	670	533	651	292	172	342	287	301	250	300	233	349	152	362	303	295	R-113
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	334	393	211	314	178	174	201	192	337	218	246	324	045	370	419	460	510	581	555	229	208	261	199	270	256	309	225	322	085	326	247	200	R-134
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	302	322	191	182	073	061	139	139	354	241	243	346	092	300	476	458	443	529	490	142	147	291	134	272	169	248	189	268	181	378	358	303	R-137
	201	146	151	307	089	231	150	159	150	110	126	222	065	228	146	254	342	424	384	129	061	164	272	181	195	183	136	246	108	297	155	059	R-138
	431		217	260	169	072	217	201	435	283	268	397	108	338	586	545	654	597	337	213	309	268	306	348	369	251	410	169	462	361	251		R-139
	431		217	277	112	073	262	228	501	336	416	385	055	400	519	572	601	678	652	417	298	309	315	363	317	453	387	474	168	489	320	320	R-140
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	072	073	060	128	161		063	072	065	086	043	144	-015	079	117	206	227	221	234	107	089	134	119	098	084	133	114	127	052	138	152	195	R-144
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	268	416	196	276	102	043	186	191	360	224		337	111	306	251	371	461	526	502	284	181	313	196	263	230	297	243	298	111	365	289	292	R-149
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	506	519	229	226	200	117	234	141	516	322	251	442	126	432		759	611	670	656	300	298	340	306	362	376	383	328	454	132	509	443	360	R-162
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	309	309	185	211	119	134	142	129	308	276	313	285	106	201	340	534	537	473	538	267	339		248	266	289	312	225	362	287	485	420	409	R-220
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	306	363	111	259	153	098	193	145	375	237	263	311	008	226	362	428	507	471	516	457	270	266	465		569	568	391	878	152	404	274	357	R-232
	148	317	146	160	221	084	182	225	346	178	230	291	045	268	376	495	507	470	515	466	355	289	469	460	460	475	765	223	460	362	337		R-233
	169	463	146	302	202	133	232	178	335	250	297	351	048	262	383	478	474	538	585	431	286	372	422	568	460		479	761	218	446	284	313	R-234
	251	367	078	249	110	114	224	140	276	142	243	249	-022	202	329	469	387	411	411	341	244	225	326	391	475	479		615	156	422	186	183	R-235
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	462	489	142	386	129	138	294	267	477	318	365	351	063	318	509	658	658	662	646	458	367	485	338	404	460	446	422	545	308		453	474	R-250
	361	320	262	141	171	152	113	157	352	321	287	050	217	483	522	521	481	531	314	237	420	195	274	362	284	186	350	171	453	394			R-260
	251	320	136	220	149	195	168	175	152	244	292	224	-015	265	360	527	515	393	495	330	305	409	161	357	337	313	183	385	179	474	354		R-270
	105	219	119	156	114	050	072	030	101	167	116	174	-040	035	396	461	241	244	276	139	214	058	193	171	195	113	220	121	278	258	369		R-281
	182	181	081	103	175	103	047	019	107	101	147	096	-086	088	272	309	241	195	235	228	200	232	104	230	266	214	210	278	208	289	361	519	R-282
	224	373	068	231	119	114	082	151	251	231	296	194	-006	113	374	428	390	373	400	335	299	366	202	367	357	316	418	240	402	342	485		R-290
	274	319	096	142	055	028	265	131	266	188	219	203	-057	152	341	458	476	379	462	322	282	330	312	296	420	373	323	424	244	405	256	313	R-311
	228	174	068	113	134	194	173	096	241	089	131	246	-047	095	341	333	337	336	365	272	228	224	203	299	259	275	294	363	207	261	221	277	R-312
	112	305	102	157	119	141	212	141	316	171	218	281	-065	153	361	492	518	446	515	373	317	344	320	371	421	402	385	490	281	414	297	367	R-333
	056	-063	173	027	015	-033	-057	036	060	-039	005	039	065	045	024	-010	006	004	012	046	076	095	075	203	030	003	108	-010	049	061			R-333
	297	244	191	151	111	111	216	139	302	135	194	263	-031	153	307	429	458	393	455	334	298	333	319	357	452	366	340	475	293	360	281	348	R-410
	251	355	223	217	129	163	247	144	315	103	314	236	-007	255	241	442	494	439	496	385	359	284	355	439	331	393	288	474	111	373	190	784	R-410
	070	033	060	109	023	100	075	105	656	-021	070	055	101	171	071	153	187	145	181	121	127	175	058	060	052	044	038	056	088	147	120	196	R-420
	-032	-046	120	038	038	065	-061	-032	-085	-021	-001	-008	022	-039	-058	-027	035	-029	015	-045	057	175	068	-064	-024	018	-040	009	131	049	051	091	R-430
	021	151	012	041	074	051	067	138	040	055	136	081	040	051	058	155	111	114	112	075	180	032	152	128	037	067	321						A-410
	085	132	181	083	-011	133	111	085	079	-016	233	147	033	148	047	118	189	196	199	153	160	188	185	114	054	111	094	128	066	094	038	109	A-410
	-070	-165	044	-017	-019	044	016	048	-131	-027	-045	070	-030	-146	-068	-044	012	007	075	-123	-107	-146	-075	-143	-197	-113	-124	-153	-013	-063	-009	-006	A-420
	-113	-121	083	-028	-064	074	-076	-040	-153	-118	-055	069	-074	-164	-150	-093	-135	-111	-145	003	110	-015	-143	-168	-113	-124	-153	090	-077	-029	004		A-430
	-083	-001	052	011	011	019	-026	144	-017	-006	013	045	024	-076	-065	001	-006	-002	017	031	130	-026	028	-011	002	-093	-031	156	029	-048	142		A-430
	170	226	023	136	155	015	134	054	247	135	058	178	-049	097	260	339	308	240	278	233	197	081	161	340	297	293	200	361	041	292	161	177	F-410
	149	240	024	106	116	-103	115	-005	158	155	171	101	-014	171	270	281	227	199	227	157	082	008	142	206	297	224	319	293	084	195	104	159	F-420
	165	152	072	131	205	-020	032	016	140	182	108	109	026	071	208	248	258	214	254	202	107	127	167	280	291	264	171	326	082	255	162	176	F-430
	036	206	-059	048	093	054	036	071	141	200	115	160	-050	165	226	211	156	201	131	079	077	140	036	176	125	145	127	186	055	163	131	322	F-440
	030	104	107	191	-062	175	066	215	088	017	059	144	035	160	018	164	229	202	229	027	092	145	-020	-008	-096	105	-056	-020	017	108	067	011	R-500
	208	225	160	180	132	151	177	208	230	178	284	197	144	217	185	288	410	377	412	141	197	251	211	198	166	187	120	230	059	231	215	163	R-601
	122	129	099	191	034	055	091	152	163	075	154	133	109	144	128	197	286	242	283	084	133	148	131	147	121	133	118	166	078	184	159	092	R-602
	035	069	092	100	000	047	051	144	123	037	098	084	130	102	-042	073	170	142	168	005	067	018	020	-006	-016	-085	-051	-044	011	017	070	019	R-603
	185	192	163	086	109	109	197	224	140	084	146	223	221	212	379	322	298	327	123	118	170	151	197	175	163	089	211	114	226	303	193		R-604
	178	144	113	189	179	185	097	224	140	084	168	221	121	139	134	212	379	322	298	327	123	118	170	151	197	175	163	089	211	114	177	153	R-605
	132	121	112	137	197	173	065	187	146	061	125	121	031	077	143	295	297	278	303	123	072	150	114	072	156	065	043	107	123	179	043	147	R-606
	173	157	164	136	177	152	200	231	156	065	155	246	098	212	143	218	334	300	336	099	160	141	139	156	161	143	110	177	121	176	166	043	R-607
	-090	-088	072	-058	-021	049	003	014	-024	-004	-010	118	020	-036	-095	-035	000	-024	-122	-117	-047	032	-077	-114	-184	-107	-128	-023	-065	017	-135		R-608
	148	216	123	210	119	196	102	214	214	019	114	078	156	220	266	332	311	339	131	209	154	203	216	166	217	109	248	027	189	194	162		R-609
	162	118	144	195	101	124	122	141	173	078	084	187	137	134	272	255	278	265	104	104	108	133	112	122	098	086	155	116	151	174	037		R-610
	-001	-112	-055	-076	023	046	028	016	-036	008	-076	-110	-178	-072	002	-004	-087	-032	-081	-052	-049	-122	-091	-059	-054	-113	-113	-168	-090	-095	-042		F-701
	014	-021	061	-126	037	-011	045	025	-009	013	-013	-011	-081	-052	001	019	-061	-007	-062	-033	-041	-103	-058	-029	-019	-016	-056	-048	-060	-024	128		F-702
	075	010	046	-003	-033	018	008	065	069	055	026	-027	-032	029	049	138	092	037	077	-021	021	041	-075	-052	-042	-019	-053	-075	-068	043	001	137	F-703
	082	002	031	-059	028	037	047	063	069	011	040	088	-134	-014	099	188	167	067	140	086	043	081	080	024	-002	039	-045	007	-048	050	062	195	F-704
	075	021	041	-070	015	059	036	059	036	059	006	088	-037	-011	110	104	095	072	026	022	052	-035	-015	010	-014	-021	-013	-019	-032	147			F-705
	141	140	-037	005	086	080	131	125	187	121	100	-106	077	112	251	226	163	214	158	054	139	004	043	097	203	091	147	-002	167	154	217		F-706
	-030	-167	044	-109	-036	-062	-150	-079	-108	-036	-157	-055	-044	-153	-036	-037	-129	-110	-049	-041	-091	-098	-104	-070	-145	-066	-040						F-707
	-152	-291	-118	-183	-212	-033	-236	-101	-165	-042	-223	-173	-078	-167	-189	-164	-188	-288	-229	-208	-184	-207	-180	-164	-147	-248	-186	-236	-097	-232	-115	-136	F-708
	046	022	-034	-051	-014	-013	-005	050	068	091	017	055	-064	018	052	150	119	016	-023	-009	043	-074	-029	-028	-001	-034	-034	-108	036	009	184		F-709
	096	064	039	011	-012	006	-006	015	083	075	167	103	036	049	035	042	042	080	-035	069	021	050	049	020	025	-072	115	037	205				F-710
	123	110	015	001	021	055	016	051	055	180	111	062	103	-061	026	036	235	149	158	149	042	066	125	-069	021	050	049	020	025	-072	115	205	F-711
	138	130	004	003	078	010	065	064	164	103	066	054	171	087	264	166	241	073	064	132	015	064	132	015	057	105	105	038	128	011	132		F-712
	059	042	010	010	-045	008	-086	054	017	034	-049	060	-016	-013	018	072	056	018	045	-049	-079	-017	-132	002	-069	-061	051	-047	-066	030	-044	068	F-713
	148	129	054	000	-032	-009	039	041	060	-016	034	218	-110	051	-055	110	110	170	178														F-714
	-043	-040	013	-036	-121	030	-093	-047	042	-010	039	-077	-016	-010	046	036	037	013	-039	-081	011	-075	-050	-026	-068	-052	-047	-009	-010	-087	068		F-715
	210	154	082	031	050	046	030	047	152	099	065	059	-081	160	195	302	305	191	289	089	049	125	017	125	147	182	168	114	153	047	196		C-001
	441	529	130	364	149	137	278	256	470	334	397	343	031	277	547	689	678	648	696	405	416	518	366	453	537	511	466	608	347	871	479	565	C-002
	507	557	191	396	226	175	349	347	345	304	033	344	563	745	781	719	792	546	431	462	579	756	733	715	602	909	318	768	515	520			C-003
	399	284	179	208	148	142	195	165	305	291	351	365	457	059	385	586	745	781	719	792	440	390	518	328	463	491	509	328	554	200	626	520	C-004
	485	525	293	379	208	240	243	330	524	351	420	431	074	427	569	805	902	710	874	440	390	518	328	463	491	509	328	554	200	626	520	743	C-005
	516	557	243	393	205	211	304	308	544	369	437	437	050	375	611	812	861	744	857	517	446	576	398	511	587	559	441	653	325	788	611	687	C-006

Table V-2b (continued)

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Var*	Var	Code	Description	58 Vis.in 2 Dimens	59 Vis.in 3 Dimens	60 Abstract Reason.	61 Math I	62 Math II	63 Math I + II	64 Math III	65 Math Tot(I+II+III)	66 Arith Computation	67 Table Reading	68 Clerical Checking	69 Object Inspection	70 Arith Computation	71 Table Reading	72 Clerical Checking	73 Object Inspection	74 Arith Computation	75 Table Reading	76 Clerical Checking	77 Object Inspection	78 Preferences	79 Sociability	80 Soc.Sensitivity	81 Impulsiveness	82 Vigor	83 Calmness
	1		Grade	067	099	154	151	168	200	004	178	282	-037	090	068	176	033	042	032	093	-071	096	067	058	138	102	077	071	139
	2		Sex (1=M, 2=F)																										
1	3	R-101	Info I: Screening	101	080	221	275	187	287	-039	237	496	122	042	147	171	-035	-068	039	332	140	221	169	195	297	221	123	234	275
2	4	R-102	Vocab I	256	270	375	433	319	468	001	412	438	168	-006	137	132	-080	-116	-036	316	234	223	216	129	288	197	120	284	214
3	5	R-103	Literature	230	223	271	265	266	312	026	303	289	104	091	105	049	-100	-053	-040	256	209	289	175	153	217	092	075	181	157
4	6	R-104	Music	059	084	148	199	248	280	020	255	284	163	077	084	120	-024	-002	041	162	157	159	082	109	244	290	170	301	207
5	7	R-105	Soc.Studies	180	143	385	440	334	481	002	425	421	147	003	101	105	-089	-135	-033	330	228	278	165	132	316	188	089	272	242
6	8	R-106	Math	130	054	153	277	229	315	052	296	236	197	076	040	191	024	049	042	024	120	054	021	248	322	216	203	247	347
7	9	R-107	Phys. Sci	136	207	294	370	266	395	-042	332	310	121	-002	124	161	-015	-067	031	141	113	131	144	190	262	169	099	223	182
8	10	R-108	Bio. Sci	168	214	324	328	272	374	032	342	342	057	-047	039	098	-129	-174	-086	254	212	257	122	052	263	147	095	181	129
9	11	R-109	Sci Attitude	275	275	368	391	240	392	067	372	309	094	-046	133	068	-105	-127	008	254	209	164	201	101	211	105	057	178	129
10	12	R-110	Aero & Space	080	188	277	349	177	325	-035	272	220	079	-027	075	043	-074	-126	-070	188	157	199	159	062	288	185	107	285	177
11	13	R-111	Elec & Electron	211	179	309	352	203	344	048	322	307	126	-024	066	154	-045	-073	-067	147	155	099	145	179	298	221	093	280	260
12	14	R-112	Mechanical	212	234	267	329	234	350	-027	277	370	136	-012	092	165	-005	-075	-021	202	112	129	143	221	343	290	141	366	273
13	15	R-113	Farming	214	191	223	374	264	397	018	356	432	208	058	132	192	014	-020	023	235	142	154	161	221	361	277	149	328	273
14	16	R-114	Home Ec	136	060	164	281	243	358	047	334	325	146	101	170	194	040	044	127	117	060	112	129	245	323	282	212	345	314
15	17	R-115	Sports	103	153	307	348	208	345	-094	266	371	096	090	168	162	-062	-026	067	207	154	232	175	243	324	182	116	324	224
	18	R-131	Info II:Art	180	167	261	295	242	334	-022	286	258	077	-082	040	047	-070	-152	-059	224	151	142	102	139	252	096	096	227	183
	19	R-132	Law	114	122	230	307	266	357	-081	283	311	120	-018	059	172	-093	-102	001	130	214	169	080	070	216	110	047	205	181
	20	R-133	Health	118	169	284	286	310	373	014	334	388	073	-080	085	135	-129	-161	-015	258	223	164	127	086	270	159	058	190	157
	21	R-134	Engineering	177	060	240	261	259	324	003	287	307	175	-021	023	150	-064	-082	-088	152	218	123	103	204	225	179	065	224	260
	22	R-135	Architecture	004	009	108	130	179	194	-014	165	188	042	011	-012	089	019	-020	-058	097	007	064	031	122	166	129	037	120	126
	23	R-136	Journalism	023	074	179	121	003	076	-093	030	062	038	-054	073	015	-017	-077	015	049	052	047	088	052	055	025	070	061	-027
	24	R-137	Foreign Travel	196	175	208	185	163	217	-039	176	214	114	009	137	111	074	-031	074	098	-009	080	127	057	112	120	074	157	123
	25	R-138	Military	055	002	073	159	183	214	-005	187	160	081	085	-002	174	096	020	045	-038	-062	131	-079	190	153	196	121	197	184
	26	R-139	Acct,Bus,Sales	195	182	224	274	228	312	056	247	251	070	-032	021	085	-070	-113	-083	170	145	165	096	040	208	122	035	185	178
	27	R-140	Pract.Knowl.	219	181	373	319	174	305	-063	244	355	033	-046	151	132	-165	-121	-061	226	240	152	206	104	225	129	009	192	144
	28	R-141	Clerical	119	081	048	096	068	102	123	139	223	060	120	-012	181	054	083	052	023	-024	072	-059	107	180	099	092	163	113
	29	R-142	Bible	156	103	231	142	113	159	027	151	217	109	038	041	083	-017	-028	011	136	106	131	048	191	180	191	100	086	189
	30	R-143	Colors	114	175	139	055	134	119	015	111	129	023	038	074	-011	-076	-064	011	155	116	205	093	-062	132	094	000	090	179
	31	R-144	Etiquette	050	103	114	028	194	141	-033	111	163	100	065	051	133	139	074	019	015	-103	-020	054	175	151	055	047	109	185
	32	R-145	Hunting	072	047	082	265	173	272	-059	216	247	075	-061	067	111	-044	-076	-006	134	115	032	096	066	177	091	051	130	097
	33	R-146	Fishing	030	019	151	131	096	141	036	139	144	105	-032	138	085	066	-040	144	054	-005	016	071	215	268	152	144	199	229
	34	R-147	Outdr Act(Other)	101	107	251	266	241	316	060	302	315	056	-085	040	079	-088	-153	-106	247	158	140	141	008	230	163	123	240	140
	35	R-148	Photography	167	101	231	188	089	171	-039	135	103	-021	-029	136	-018	-131	-118	-017	135	155	182	200	017	178	075	037	091	084
	36	R-149	Games	136	147	296	219	133	218	005	194	314	090	-001	116	233	-037	-055	048	058	117	108	119	059	244	154	158	263	168
	37	R-150	Theater,ballet	124	096	194	203	246	281	037	264	236	055	-008	061	147	-045	-062	013	078	101	109	100	035	197	133	084	180	221
	38	R-151	Foods	-040	-086	-006	-057	-047	-065	065	-031	-007	101	022	-010	033	-070	009	045	035	124	109	130	146	121				
	39	R-152	Miscellaneous	035	088	113	152	095	193	045	153	255	171	-039	058	148	-030	-074	074	097	170	071	059	018	160	219	144	102	223
	40	R-162	Vocabulary II	230	272	374	341	241	361	-028	307	291	071	-058	064	047	-166	-160	-096	260	270	208	165	018	185	128	-047	221	134
	41	R-172	Vocab Tot. (I & II)	282	309	428	458	333	492	-010	442	442	153	027	128	118	-125	-150	-065	339	281	248	226	104	288	197	073	249	212
16	42	R-190	Info I Total	241	241	390	476	357	518	005	458	494	187	035	155	189	-064	-093	061	308	227	258	211	229	410	286	170	379	322
	43	R-192	Info II Total	221	195	373	379	336	446	002	343	439	145	-029	111	196	-067	-135	-006	240	199	214	156	202	367	242	142	322	298
	44	R-100	Info Total (I & II)	244	235	400	462	365	515	004	455	496	181	015	146	199	-068	-111	-002	298	227	254	201	229	412	283	168	375	327
17	45	R-211	Memory for Sentences	276	228	335	322	277	373	012	334	385	121	-045	142	153	-049	-145	017	233	157	202	139	027	141	084	005	087	123
18	46	R-212	Memory for Words	139	200	299	262	228	317	046	298	359	127	057	075	160	012	003	031	197	082	107	077	092	197	133	067	083	118
19	47	R-220	Disguised Words	214	232	346	330	224	344	076	333	284	175	175	180	188	097	110	130	081	008	127	140	145	251	148	018	201	170
20	48	R-231	English:Spelling	058	104	202	312	203	320	099	319	355	048	068	032	185	-075	-015	-026	161	142	167	064	-020	211	131	020	129	151
21	49	R-232	Capitalization	193	230	327	276	299	371	075	337	459	060	-004	152	114	-123	-143	028	340	206	280	185	-008	198	147	-006	116	197
22	50	R-233	Punctuation	171	266	361	420	259	421	203	452	333	052	-024	078	054	-197	-168	-108	297	297	291	125	-096	166	121	-016	052	175
23	51	R-234	Usage	145	214	357	373	275	402	030	366	393	044	018	108	111	-146	-113	002	293	224	264	145	105	187	133	-085	070	163
24	52	R-235	Eff. Exp.	173	210	316	323	294	385	003	340	288	038	-040	038	094	-223	-124	-093	200	319	171	127	-056	120	118	-051	073	089
25	53	R-230	Total	220	278	418	424	363	490	108	475	474	056	009	118	128	-192	-153	-031	361	223	326	186	-020	230	166	-044	116	211
26	54	R-240	Word Functions	121	208	246	244	207	281	114	293	111	088	131	148	066	-013	090	156	041	084	082	075	017	059	078	011	066	114
27	55	R-250	Reading Comprehension	278	289	362	405	261	414	-010	360	373	147	049	137	094	-063	-077	029	292	195	255	163	108	231	184	017	226	177
28	56	R-260	Creativity	258	161	342	256	221	297	047	281	190	120	051	067	038	-009	-029	-048	161	104	162	131	067	215	131	070	221	193
29	57	R-270	Mechanical Reasoning	369	519	485	313	277	367	061	346	284	196	091	321	109	-006	004	147	177	150	176	322	011	163	092	019	193	130
30	58	R-281	Vis. in 2 Dimens		423	353	147	112	191	034	186	166	149	035	238	-027	-088	-032	061	148	229	136	276	-039	022	-038	-146	033	078
31	59	R-282	Vis. in 3 Dimens	423		418	256	151	252	-020	215	114	007	028	184	-063	-109	-034	017	201	147	125	238	-153	-029	-071	-158	011	-022
32	60	R-290	Abstract Reasoning	353	418		383	263	401	-039	338	252	027	-037	240	014	-165	-106	019	258	235	140	311	-160	056	-045	-126	018	071
33	61	R-311	Math I	197	256	383		282	788	074	724	407	138	-028	032	154	-119	-102	-075	256	261	150	105	005	196	092	-008	162	151
34	62	R-312	Math II	112	151	263	282		813	000	748	162	035	-008	-021	149	-060	-064	-097	213	126	114	049	-006	116	103	059	153	158
35	63	R-320	Math I & II	191	252	401	788	813		096	919	479	107	-022	006	189	-111	-103	-107	292	226	164	095	-000	193	122	033	196	193
36	64	R-333	Math III	034	-020	093	074	080	096		480	-025	196	086	-082	053	076	090	048	-092	-025	-009	-151	-082	099	023	004	034	030
37	65	R-340	Math Total(I+II+III)	182	215	338	724	748	919	480		412	132	014	-027	187	-068	-055	-076	221	189	141	024	-035	210	117	031	186	182
42	66	R-410	Arith Computation	106	114	262	407	362	479	-025	412		232	242	191	633	073	120	120	317	083	244	158	179	217	216	115	257	243
43	67	R-420	Table Reading	147	007	027	138	035	107	096	132	232		402	245	353	641	406	376	-179	-065	-015	028	414	223	209	185	216	279
44	68	R-430	Clerical Checking	035	028	-037	-028	-008	-022	086	014	242	402		340	351	417	877	486	-166	-233	236	069	274	128	145	105	146	177
45	69	R-440	Object Inspection	238	184	240	032	-021	006	-082	-027	191	245	340		149	102	255	685	026	055	168	806	152	150	057	062	037	095
46	70	A-410	Arith Computation	-027	-063	014	154	149	189	005	187	633	353	351	149		434	394	360	-533	-373	-091	-089	183	205	205	187	263	302
47	71	A-420	Table Reading	-088	-109	-165	-119	-060	-111	076	-068	073	641	417	102	434		524	480	-451	-808	-232	-250	448	160	172	219	193	229
48	72	A-430	Clerical Checking	-032	-034	-106	-102	-064	-103	090	-055	120	406	877	255	394	529		503	-352	-176	-260	-061	334	135	147	116	139	190
49	73	A-440	Object Inspection	061	017	019	-075	-097	-107	048	-076	126	176	486	685	360	480	503		-304	-335	-040	122	329	206	157	186	135	186
38	74	F-410	Arith Computation	148	201	258	256	213	292	-092	221	317	-179	-166	026	-533	-451	-352	-304		449	377	282	-195	-014	-015	-103	-042	-105
39	75	F-420	Table Reading	229	147	235	261	106	226	-025	189	083	-065	-233	055	-293	-808	-376	-335	449		240	347	-263	-036	-064	-143	-085	-083
40	76	F-430	Clerical Checking	136	125	140	150	114	164	-009	141	244	-015	236	168	-091	-232	-260	-040	377	290		261	-123	-015	-006	-064	012	-029
41	77	F-440	Object Inspection	276	238	311	105	049	095	-151	024	158	028	069	806	-689	-250	-061	122	-100	347	261		-100	037	-049	-066	-009	-022
50	78	A-500	Preferences	-039	-153	-160	005	-006	000	-082	-033	179	414	274	127	318	448	334	329	-195	-265	-123	-100		348	363	374	320	422
51	79	R-601	SAI: Sociability	022	-029	056	196	116	193	099	210	217	223	128	150	205	160	135	206	-014	-036	-015	037	348		580	495	584	580
52	80	R-602	Soc.Sensitivity	-038	-071	-045	092	103	122	023	117	216	209	145	057	205	172	147	157	-015	-064	-006	-049	363	580		543	638	650
53	81	R-603	Impulsiveness	-146	-158	-120	-008	129	033	004	031	115	185	105	062	187	219	116	186	-163	-143	-024	-066	374	495	543		484	423
54	82	R-604	Vigor	033	011	018	162	153	196	034	186	257	216	146	037	263	193	139	135	-042	-085	012	-059	320	584	638	489		579
55	83	R-605	Calmness	078	-022	071	151	198	193	030	182	243	279	177	099	302	229	140	146	-165	-083	-029	-022	422	580	650	423	579	
56	84	R-606	Tidiness	-031	-042	006	084	119	127	011	116	219	208	104	075	278	181	099	097	-101	-075	010	023	315	566	652	503	628	554
57	85	R-607	Culture	-008	-081	-037	166	190	159	083	173	254	224	101	003	236	175	103	120	-012	-027	-006	-094	347	620	657	470	647	611
58	86	R-608	Leadership	-209	-179	-174	-027	-042	-043	011	-034	052	220	111	-040	219	293	189	107	-211	-212	-160	-141	216	310	460	414	485	415
59	87	R-609	Self-Confidence	003	006	040	087	131	137	-005	119	186	072	105	184	090	060	067	160	-092	-023	075	121	315	391	267	273	205	340
60	88	R-610	Mature Personality	-050	-094	-047	034	101	085	076	114	164	160	146	053	192	151	151	136	-056	-173	-012	-039	343	575	690	499	599	654
	89	F-701	Int Inv: Phys Sci	040	005	-054	-024	-140	-105	-022	-101	-177	-021	-096	052	-232	-237	-070	-114	091	032	-051	161	009	-031	-073	030	-154	-169
	90	F-702	Biol Sci & Med	102	131	043	044	-187	-029	-043	-043	-135	-009	-107	055	-236	-083	-130	-108	141	161	049	163	-077	-076	-117	030	-124	-138
	91	F-703	Pub Serv.	064	098	042	-001	-094	-061	-055	-076	-119	032	-080	-005	-186	-031	-107	-149	097	065	057	114	-014	-065	-070	011	-101	-145
	92	F-704	Lit-Ling.	067	080	085	045	-035	005	000	004	026	-129	-124	-040	-184	-040	-125	-138	149	166	003	190	-014	-005	-073	030	-108	-106
	93	F-705	Soc.Serv.	104	106	126	083	-026	034	-048	011	-051	-016	-132	063	-203	-078	-170	-153	193	089	000	210	-030	-024	-087	025	-098	-133
	94	F-706	Artistic	-035	026	043	038	-015	013	-052	-009	-002	-037	-074	018	-120	-075	-088	-093	145	068	030	102	-015	-016	036	-056	-112	-160
	95	F-707	Musical	090	110	169	165	115	174	-016	147	033	008	-113	-021	-113	-090	-142	-151	175	123	059	094	-002	032	-084	-016	-059	-101
	96	F-708	Sports	090	-006	084	-121	-144	-164	-018	-147	-232	-062	-077	-040	-236	001	-047	014	154	089	-060	092	-036	-188	-134	-018	-121	-192
	97	F-709	Outdr Rec.	-029	-042	-175	-108	-127	-145	-043	-146	-216	023	-003	-038	-159	032	-064		-041	-121	-072	000	-036	-177	-129	-039	-153	-169
	98	F-710	Bus.-Mgmt.	106	087	076	-047	-020	-017	022	007	-126	-037	-118	-049	-195	-072	-118	-164	107	073	085	168	-056	-070	-025	005	-078	-122
	99	F-711	Sales	063	088	109	038	-015	014	060	036	-056	072	-049	070	-146	-040	-073	-118	118	107	049	191	-056	-071	-025	005	-078	-122
	100	F-712	Computation	101	109	166	109	-002	065	-055	055	-043	001	-131	043	-231	-100	-154	-112	213	131	048	217	-049	039	-024	048	046	-117
	101	F-713	Office Work	138	119	217	136	087	139	-044	108	-012	-090	-126	078	-168	-095	-153	-130	193	127	054	211	-041	039	-024	057	-033	-061
	102	F-714	Mech-Tech	112	063	063	-027	-034	-040	-094	-031	-052	143	-115	102	-263	-103	-128	-108	125	030	030	138	-037	-025	-035	016	-087	-137
	103	F-715	Skilled Trades	119	092	136	048	011	066	-012	031	-052	145	-115	102	-161	-074	-155	-160	141	131	082	220	-015	-020	-039	-006	-045	-093
	104	F-716	Farming	170	019	073	020	-020	-001	-026	-004	061	081	-027	068	-091	-074	-008	-058	045	018	-031	125	024	-020	-100	055	-112	-140
	105	F-717	Labor	148	107	191	129	112	150	-072	104	041	038	-092	040	-163	-089	-148	-122	245	145	115	153	053	-015	-002	-002	005	-051
	106	C-001	Composite: I.Q.Comp.	363	412	751	655	337	614	-004	540	431	135	007	189	102	-136	-116	006	347	280	249	253	001	212	116	-043	185	174
	107	C-002	Gen.Acad.Apt.	302	361	553	603	517	698	082	647	535	122	016	152	158	-156	-143	-037	391	310	322	212	030	273	185	-007	183	233
	108	C-003	Verbal	266	316	457	467	393	536	085	506	506	093	014	135	132	-191	-159	-044	391	319	349	220	030	273	185	-007	183	233
	109	C-004	Quantitative	187	192	322	653	781	884	479	969	463	161	037	021	213	-045	-029	-094	191	183	133	015	029	262	158	083	225	247
	110	C-005	Technical	290	375	452	454	327	485	012	432	419	175	008	185	173	-048	-098	006	245	197	213	247	149	356	248	120	346	262
**	111	C-006	Sci. Apt.	354	424	635	656	478	705	112	665	482	183	020	167	170	-092	-103	-011	318	260	249	236	077	326	206	057	302	260

Column labels (diagonal headings, left to right): Tidiness (84), Culture (85), Leadership (86), Self-Confidence (87), Mature Personality (88), Phys.Sci. (89), Biol.Sci & Med (90), Pub.Serv. (91), Lit-Ling. (92), Soc.Service (93), Artistic (94), Musical (95), Sports (96), Outdr.Rec. (97), Bus-Mgmt (98), Sales (99), Computation (100), Office Work (101), Mech-Tech (102), Skilled Trades (103), Farming (104), Labor (105), I.Q.Comp. (106), Gen.Acad.Apt. (107), Verbal (108), Quantitative (109), Technical (110), Sci.Apt. (111).

84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	MEAN	S.D.	Code
119	065	-070	108	065	-007	037	-011	072	098	086	100	-060	-072	029	061	074	142	-001	133	-002	193	141	199	198	163	229	208	8.0018	2.1988	
																												1.0000	.0000	
187	3C7	-074	319	253	0C3	035	056	113	089	134	142	-070	-132	042	076	123	123	-065	140	027	165	413	521	544	284	525	496	8.7986	2.6681	R-101
183	213	-109	267	148	041	081	159	186	199	153	277	-020	-170	173	175	240	294	087	262	067	302	633	681	688	464	777	765	5.9364	3.3107	R-102
178	158	-118	252	092	083	082	081	095	180	075	234	-035	-093	108	202	203	233	148	244	068	249	483	565	635	378	604	602	5.9894	2.9344	R-103
265	216	105	134	238	-017	-030	016	-026	083	058	052	-104	-125	058	103	082	147	091	096	029	151	281	408	438	326	423	404	2.5901	1.7869	R-104
225	236	-022	225	195	-053	-044	057	017	086	036	159	-112	-181	066	152	156	218	064	183	062	281	640	683	657	479	666	717	6.6643	4.1630	R-105
304	285	097	247	329	-101	-119	009	-059	-007	-062	093	-112	-075	018	016	017	050	-053	063	-084	092	323	446	426	509	478	493	3.7491	2.1566	R-106
218	218	-015	248	150	-029	-043	089	060	146	041	141	-030	-103	083	130	111	225	071	177	059	223	509	556	53a	389	754	679	4.4452	2.6092	R-107
132	159	-048	219	167	-016	-033	008	019	091	-006	111	-130	-147	030	094	129	113	012	104	000	127	498	568	560	372	682	631	3.3004	1.9032	R-108
052	131	-127	C81	C65	086	113	086	174	197	145	222	-C12	-135	152	187	147	242	091	263	072	271	528	582	581	391	611	619	3.0707	1.8704	R-109
261	248	C32	160	146	066	068	066	111	126	156	-065	-082	147	179	204	261	093	276	097	269	441	448	450	312	632	570		2.2933	1.5830	R-110
254	240	006	226	216	-037	022	105	065	100	065	159	-099	-121	077	128	123	138	009	131	023	179	482	541	551	392	773	671	4.3004	2.4141	R-111
279	344	-022	262	258	007	080	083	138	195	122	196	-C94	-167	142	188	185	192	-023	200	007	278	490	543	539	342	805	685	6.3180	3.3013	R-112
202	259	-043	290	241	017	076	094	130	146	126	211	-068	-154	110	147	172	195	009	177	060	246	496	593	616	385	684	640	4.3251	2.5265	R-113
244	280	C28	266	257	-02H	-054	-001	019	046	012	084	-C93	-163	033	064	C68	172	-019	121	-011	241	357	446	435	386	556	513	4.9505	2.5372	R-114
185	248	027	264	156	-039	-044	300	-005	030	068	069	-213	-124	006	142	100	166	027	130	-005	208	495	556	565	313	545	559	4.6360	2.2436	R-115
158	216	-035	231	157	-034	003	043	036	109	-06O	185	-041	-124	C67	C62	122	168	088	149	-006	209	464	522	528	329	515	539	2.7385	1.8950	R-131
158	164	C19	160	094	-179	-125	-052	-076	-038	-039	073	-237	-257	-104	-155	-033	058	-069	025	-129	068	401	442	417	308	379	431	2.5548	1.4488	R-132
195	152	-004	168	128	-087	-072	044	-014	097	015	136	-141	-226	047	027	C52	229	049	-038	135	538	594	566	386	487	5(5		2.6C42	1.8312	R-133
157	214	080	238	246	-093	-083	-014	018	039	-047	029	-164	-165	024	-005	013	054	-037	080	-062	117	361	412	408	330	430	443	1.5901	1.1368	R-134
121	164	-027	145	1C2	-046	-018	-017	-022	019	015	-052	-072	-075	-075	-004	028	-005	034	080	018	106	209	274	294	180	241	257	1.5654	1.0511	R-135
067	038	-021	092	-034	-016	-016	048	021	022	-034	053	-042	-049	-003	C69	055	066	024	097	131	087	245	186	183	069	255	260	.6820	.708l	R-136
124	16C	C61	111	095	027	069	144	123	185	044	148	009	-068	135	141	175	254	079	176	040	203	360	371	362	204	413	419	1.3816	1.0993	R-137
241	147	146	129	196	-082	-104	-064	-088	-020	-027	-008	-048	-049	-062	-035	-038	-018	040	C30	040	010	250	306	299	231	248	284	1.3675	1.1757	R-138
132	173	-020	148	162	-001	014	075	082	117	075	141	-030	-152	046	096	123	138	059	138	-043	210	441	507	509	339	485	516	2.1166	1.4232	R-139
121	157	-088	216	118	-112	-021	010	002	023	-021	140	-167	-291	022	C04	110	138	-032	074	-040	154	529	557	554	284	525	557	1.3640	1.0972	R-140
137	136	-058	210	195	-076	-126	-0C3	-059	-023	-070	005	-109	-183	-051	011	0C1	003	010	009	-036	033	364	396	390	208	379	393	.6820	.6826	R-141
097	177	-021	119	101	023	037	-033	028	006	015	086	-036	-212	-014	C22	C21	078	-045	032	-121	050	149	220	235	148	208	205	3.3428	2.0157	R-142
173	152	049	196	124	046	-011	018	037	022	059	C80	-C62	-033	-013	006	055						137	175	164	142	240	211	.8375	.7730	R-143
065	200	003	102	102	028	045	008	047	017	036	113	-150	-236	-0C5	-006	130	060	-086	039	-093	036	278	308	294	195	293	304	.4099	.5664	R-144
187	231	014	214	141	016	025	065	063	049	059	125	-079	-101	-030	015	055	084	054	044	-007	047	256	274	265	165	330	308	1.3640	1.0678	R-145
146	156	-024	214	173	-036	-009	076	080	077	034	187	-108	-165	068	083	18C	184	017	111	042	152	470	527	529	333	524	544	.9929	.9453	R-146
045	065	-004	219	078	008	013	055	014	090	019	121	-030	-042	091	075	111	103	-034	119	-021	099	470	527	529	333	524	544	2.2085	1.5190	R-147
233	155	-C08	174	080	-084	-013	026	020	040	057	100	-157	-223	017	-047	062	086	-049	083	010	069	345	345	345	166	351	369	.5618	.6460	R-148
231	246	-010	174	187	027	-011	-027	015	088	006	144	-055	-173	055	103	1C3	086	-049	083	010	069	397	384	365	230	428	437	1.2933	1.0152	R-149
150	198	118	078	131	-110	-081	-032	-081	-134	-088	-106	-C44	-078	-044	034	-061	-067	016	-059	-077	-008	343	440	457	317	431	437	1.9046	1.2239	R-150
121	218	020	156	137	-078	-052	079	-004	-014	-037	077	-153	-174	018	036	C26	048	013	046	-016	146	021	031	059	005	079	050	.6537	.7487	R-151
097	143	-C36	220	134	-072	001	049	042	099	-011	112	-056	-189	052	C93	141	171	018	155	-C10	195	277	344	385	211	427	375	2.4841	1.6638	R-152
175	216	-005	286	163	002	061	138	155	188	110	251	-037	-164	150	148	235	287	072	256	046	302	547	583	586	351	569	611	2.4240	1.7515	R-162
297	334	-C35	332	272	-004	019	042	101	167	1C4	226	-115	-188	119	181	199	264	026	243	036	316	689	738	745	484	805	812	8.3604	4.4368	R-172
278	3C0	060	311	255	-087	-061	017	014	067	-005	163	-171	-288	016	058	118	164	018	138	-037	197	648	725	719	460	710	744	70.3075	27.2840	R-190
303	336	-C24	339	278	-032	-067	077	076	140	072	214	-138	-229	089	147	180	241	045	218	013	289	696	790	792	536	874	857	34.6600	14.0540	R-192
061	099	-122	131	065	-081	-062	-021	043	082	026	158	-131	-200	-023	-045	059	073	-049	058	-039	089	696	790	792	536	874	857	105.0200	39.6620	R-100
C72	160	-117	209	104	-052	-033	071	043	043	022	054	-129	-184	-009	042	C66	064	-079	004	-084	049	416	447	431	314	390	446	6.4064	3.2781	R-211
150	145	-047	154	108	-041	011	032	062	081	052	139	-040	-049	043	080	125	132	-017	125	011	125	518	503	462	364	518	576	6.6855	3.6139	R-212
114	139	C32	203	133	-122	-103	-075	-089	-030	-035	004	-089	-18C	-074	-035	-009	015	-132	-055	-075	017	366	579	623	338	328	398	6.6078	3.8169	R-220
102	156	-077	216	112	-091	-056	-052	-000	024	-015	043	-116	-164	-029	042	C66	104	002	069	-050	125	463	755	828	375	463	511	6.4360	2.4865	R-231
111	161	-114	166	122	-059	-024	-042	-001	042	010	097	-041	-147	-028	070	050	080	-069	048	-026	066	532	733	750	469	491	587	21.5866	7.1182	R-232
C65	141	-044	217	098	-054	-013	019	003	039	039	205	-191	-244	-001	053	141	110	-061	065	-068	133	511	715	759	383	5C4	559	10.2403	3.7349	R-233
C47	110	-077	109	C86	-113	-016	-053	-048	-045	014	091	-098	-186	-034	-C19	020	071	-051	C19	-052	088	466	602	598	332	328	441	10.9788	8.3361	R-234
107	177	-128	248	155	-113	-056	-075	-028	007	-021	111	-146	-236	-065	016	C51	105	-047	055	-080	116	608	909	962	496	554	653	5.1C60	2.4457	R-235
064	121	023	027	116	-168	-088	-068	-074	-048	-C33	002	-070	-097	-108	-C18	-C72	003	-066	-015	009	014	608	909	962	496	554	653	52.5600	15.3339	R-230
123	176	-065	181	151	-096	-060	041	010	051	-019	167	-145	-232	036	065	115	128	030	110	-010	153	349	314	218	781	2C0	325	5.0389	2.3630	R-240
179	166	017	194	074	-095	-024	0C1	032	062	-032	154	-056	-115	0C9	060	031	071	-044	049	-087	047	871	768	640	382	626	788	12.6360	7.2036	R-250
043	043	-143	162	C67	C32	128	137	186	197	107	212	-040	-130	184	190	205	228	068	178	043	196	191	515	451	326	320	611	4.5901	2.7357	R-260
-031	-0C8	-209	003	-C5C	040	102	064	C67	104	-035	090	090	-029	106	063	1C1	138	112	119	070	148	565	520	465	362	743	687	7.3251	3.5119	R-280
-042	-C81	-170	0C6	-004	0C5	131	080	080	106	076	110	-006	-042	047	C88	09)	119	063	092	019	166	363	302	266	187	290	354	4.9117	5.5604	R-281
006	-037	-174	048	-047	-054	043	042	085	126	043	169	-084	-175	078	102	166	217	063	136	059	191	412	361	316	192	375	424	5.9258	2.7129	R-282
084	160	-027	087	034	-024	044	-061	045	083	038	165	-121	-108	013	038	109	136	-027	098	020	129	655	603	467	653	454	656	4.8C57	2.9489	R-289
119	C5C	-043	131	1C1	-140	-087	-094	-035	-026	-015	115	-141	-127	-040	-C02	087	028	011	-020	112	337	517	593	761	327	478		5.3074	2.4044	R-311
127	157	-043	137	085	-105	-029	-061	005	034	013	174	-164	-147	-017	014	065	139	-034	066	-001	150	614	648	536	484	485	705	9.5300	3.7447	R-312
011	083	011	005	026	-022	-043	-055	C00	-004	-052	-116	-018	039	022	060	-005	-044	-009	-012	-008	-072	-004	082	085	479	012	112	2.1625	1.6806	R-320
116	173	-034	119	105	-101	-043	-076	004	004	-000	147	-152	-146	007	036	055	105	-034	054	-004	104	540	647	5C6	369	432	665	11.6926	4.2434	R-333
219	254	052	186	164	-177	-135	-119	-062	-051	-002	033	-232	-216	121	-056	-056	-012	-181	-052	-061	041	431	535	506	413	419	482	23.6643	10.0698	R-340
208	224	220	072	160	-021	-009	032	019	-016	037	008	-056	023	028	072	061	004	335	045	181	038	135	122	093	161	175	183	6.3675	5.9022	R-410
104	1C1	111	105	146	-096	-107	-080	-124	-132	-074	-113	-077	-003	-1C5	-044	-131	-126	-143	-115	-024	-092	007	016	014	037	0C4	020	27.5371	13.3558	R-430
075	0C3	-040	184	053	050	055	-005	060	063	01H	-021	000	-038	030	070	045	078	050	102	058	040	189	133	135	C21	185	16C	16.9717	7.2716	R-420
278	236	219	000	192	-232	-236	-186	-184	-200	-120	-113	-236	-159	-195	-146	-231	-168	-263	-161	-091	-163	102	158	132	213	173	170	32.6855	15.0520	A-410
181	154	293	C60	151	-037	-083	-031	-040	-078	-075	-090	-000	-042	-012	-100	-045	-0L3	-074	103	-089	-136	-166	-191	-045	-048	-092		19.0C35	19.4738	A-420
C99	1C3	169	C67	151	-070	-130	-107	-125	-170	-088	-142	-047	032	-118	-073	-154	-153	-128	-155	-008	-148	-116	-143	-159	-020	-09H	-103	37.7491	17.9223	A-430
-101	-012	-211	092	-056	091	141	117	159	193	145	175	035	-041	107	118	213	193	125	141	045	245	0C6	-011	-011				21.2367	8.6748	A-440
-075	-029	-212	-023	-073	032	101	065	066	089	068	123	-049	-121	116	107	118	213	193	125	141	045	347	391	391	191	245	318	-.3399	36.8683	F-410
010	-00C	-160	015	-012	-051	049	057	003	080	068	059	-060	-072	027	049	048	054	-030	082	-031	145	280	310	319	183	197	260	-.6268	15.3579	F-420
023	-094	-141	121	-039	161	1b4	134	170	192	000	114	191	217	211	130	220	125	153	252	249	322	349	133	213	249			-.C198	26.6190	F-430
315	347	216	315	383	00)	-077	-014	-014	-034	-039	-002	-084	-036	-076	-056	-049	-041	-037	-015	024	015	001	028	030	025	149	077	12.1C67	10.6825	F-440
566	620	310	391	575	-031	-076	-065	-005	-024	-015	032	-188	-177	018	-C71	-0b	039	-075	-020	-048	-015	212	282	273	262	356	326	58.1307	36.0289	A-500
652	657	460	267	690	-073	-117	-070	-073	-087	-105	-084	-134	-129	-072	-025	-064	-024	-095	-039	-100	-015	116	195	185	158	248	206	4.3463	2.4042	R-601
503	470	414	273	499	035	-010	-011	030	025	036	-016	-018	-039	025	005	008	037	016	-006	055	-002	-043	-003	-001	083	120	057	2.8657	1.9995	R-602
628	647	405	205	599	-154	-124	-1C1	-108	-098	-056	-054	-211	-153	-085	-078	-046	-033	-087	-045	-112	005	185	213	183	225	346	302	-1.4364	1.6619	R-603
554	611	415	340	654	-167	-138	-145	-106	-133	-112	-101	-192	-169	-141	-122	-117	-161	-137	-093	-140	-051	174	252	233	247	262	260	2.2404	1.7728	R-604
678	678	515	209	646	-093	-133	-093	-099	-073	-056	-054	-073	-042	-066	-023	-081	002	-037	-011	-010	019	174	252	233	247	262	260	2.5548	1.8868	R-605
678		393		645	-114	-153	-071	-136	-133	-071	-073	155	-159	-135	-159	-087	-119	-011	-164	-010	019	133	215	207	221	275	242	3.5053	2.2930	R-606
515	393		083	478	-160	-177	-116	-204	-144	-163	-191	-049	-000	-137	-127	-163	-141	-083	-142	-073	-193	118	-110	-137	-006	-051	-075	3.5018	2.1278	R-607
209	786	003		335	-029	-179	-078	-013	-069	013	-110	-138	-095	-C19	-019	-032	-086	-082	-092	-092	-118	172	169	182	214	174		7.8233	4.0786	R-608
656	645	478	335		-164	-179	-123	-125	-115	-063	-069	-132	-111	-105	-115	-123	-177	-167	-080	-082	156	263	292	168	289	250	3.5866	1.8476	R-609
-093	-114	-160	-093	-164		786	621	751	795	751	643	595	570	328	746	664	768	703	705	689	496	539	-082	-125	-074	-122	004	-071	49.1979	12.1409	F-701
-133	-153	-177	-079	-179	786		621	751	729	662	601	558	316	741	657	758	677	614	654	547	-008	-057	-017	078	061	004		25.6431	6.31B6	F-702
-093	-152	-116	-058	-123	651	641		757	683	583	551	418	254	739	598	687	587	500	623	400	468	043	-033	-015	-073	122	056	34.2580	11.2237	F-703
-091	-136	-204	-013	-123	795	751	757		811	743	713	728	320	835	706	613	744	683	753	490	584	053	000	027	-017	143	087	50.3428	11.4132	F-704
-073	-131	-144	-C63	-115	751	729	683	811		660	634	561	339	790	706	777	751	646	770	527	516	104	040	021	-002	211	143	37.7703	11.4412	F-705
-056	-101	-163	-020	-063	643	642	583	713	660		625	389	198	677	491	651	607	447	558	312	516	016	-010	000	-029	10C	044	22.5371	5.2546	F-706
-073	-155	-140	-130	-132	570	558	418	528	561	625		389	198	677	491	512	501	601	442	397	212	185	176	147	228	241		16.6996	4.1124	F-707
-042	-159	-060	-138	-111	328	316	254	320	339	329	389		198	572	351	393	393	119	285	413	366	494	-239	-174	-126	-162	-09A	-152	22.0212	6.3826	F-708
-066	-135	-137	-095	-105	746	687	813	790	835	677	552	351		733	155	670	794	510	671	-057	001	026	-004	153	074			7.8763	2.7386	F-709
-023	-097	-127	-075	-105	664	657	598	706	705	586	499	492	393		777	738	728	679	756	502	650	165	087	102	044	181	181	42.7845	9.9309	F-710
-081	-112	-161	-032	-123	768	708	687	813	777	661	653	493	318	738		766	663	769	511	639	165	087	102	044	211	181		19.2111	4.4567	F-711
-002	-087	-141	-032	-123	705	683	587	744	751	635	607	512	285	755	728	766		722	769	511	639	201	161	179	092	262	231	32.5C86	7.5749	F-712
-038	-143	-083	-096	-177	705	614	500	813	794	769	683		722		771	596	683	037	-024	001	-043	047	023	44.1590	10.4516		23.2049	5.7938	F-713
-G11	-079	-142	-082	-077	689	654	623	753	770	645	558	501	366	679	679	791	710	587	596	683	037	-024	001	-043	047	023		44.1590	10.4516	F-714
-010	-164	-073	-052	-162	607	607	490	790	749	539	462	390	517	507	596	574					524	023	-051	-042	-027	047	016	58.1155	11.9133	F-716
019	-012	-193	-052	-086	539	547	468	584	616	448	397	300	611	734	683	524						204	176	194	109	288	243	19.9223	5.6413	F-717
097	118	-110	156	C80	-008	043	053	104	016	212	-153	-239	057	094	165	201	037	147	023	204	204	176	194	109	288	243		33.4576	6.9530	F-717
157	215	-119	263	169	-125	-055	-030	048	-010	185	-174	-258	001	062	087	161	000	135	-052	194	843	692	528	679	903		78.8029	39.3438	C-001
-147	-221	-137	-292	169	-074	-017	-015	027	074	020	176	-126	-232	023	095	102	179	001	135	-042	194	843	948		716	883		277.4276	82.7649	C-002
256	275	-063	289	214	004	061	122	143	211	108	228	-008	-175	158	204	218	262	047	237	047	288	692	948	545	695	773		66.7562	19.9144	C-003
211	242	-075	250	174	-071	004	056	082	143	044	241	-152	-226	094	146	181	231	023	184	016	243	679	716	695	488	695		50.0459	17.1775	C-004
																						903	883	773	645	852		27.4823	11.4000	C-005

Table V-2c.   15-year-old boys irrespective of school status (Population from Tables V-2a and V-2b combined) (N=3656)

Var*	Var	Code	Description	Grade 1	Sex 2	Screening 3	Vocab I 4	Literature 5	Music 6	Soc. Stud. 7	Math 8	Phys. Sci 9	Bio. Sci 10	Sci Attitude 11	Aero & Space 12	Elec & Electron 13	Mechanical 14	Farming 15	Home Ec 16	Sports 17	Art 18	Law 19	Health 20	Engineering 21	Architecture 22	Journalism 23	Foreign Travel 24	Military 25
	1		Grade			389	404	372	298	380	333	303	355	354	254	259	349	324	288	351	327	310	368	296	217	260	284	190
	2		Sex (1=M, 2=F)																									
1	3	R-101	Info I: Screening	189			526	456	407	559	374	440	448	464	358	378	510	497	432	480	439	413	467	441	276	322	346	264
2	4	R-102	" Vocab I	404		526		742	656	757	688	724	679	644	652	634	659	599	525	616	675	620	675	570	478	571	592	480
3	5	R-103	" Literature	172		456	742		674	735	666	628	609	561	589	494	490	463	442	565	684	589	609	470	499	570	608	502
4	6	R-104	" Music	298		407	656	674		638	602	568	532	441	523	482	441	392	442	520	621	512	545	436	449	532	538	425
5	7	R-105	" Soc.Studies	380		559	757	735	638		656	690	652	600	597	541	566	544	496	633	654	617	652	521	478	559	623	499
6	8	R-106	" Math	333		374	688	666	602	656		674	576	561	574	484	421	441	532	568	542	567	461	447	501	518	423
7	9	R-107	" Phys. Sci	303		440	724	628	568	690	674		663	556	640	695	582	521	469	483	582	539	596	506	406	468	534	414
8	10	R-108	" Bio. Sci	355		448	679	609	532	652	576	663		540	568	550	577	555	478	468	544	515	596	494	406	444	499	388
9	11	R-109	" Sci Attitude	354		464	644	561	481	600	539	556	540		481	471	526	481	431	520	529	515	533	448	371	445	452	343
10	12	R-110	" Aero & Space	254		358	652	589	523	597	561	640	568	481		618	551	425	404	442	530	509	504	466	387	459	509	421
11	13	R-111	" Elec & Electron	259		378	634	494	482	541	574	695	550	471	618		649	462	445	367	479	480	484	491	336	397	425	323
12	14	R-112	" Mechanical	349		510	659	490	441	566	484	582	577	526	551	649		619	501	455	471	523	524	525	336	401	421	323
13	15	R-113	" Farming	324		497	599	463	392	544	421	521	555	481	425	462	619		466	439	429	450	493	460	311	357	371	293
14	16	R-114	" Home Ec	288		432	525	442	442	496	441	469	478	431	404	445	501	466		387	429	404	473	397	306	370	361	272
15	17	R-115	" Sports	351		480	616	565	520	633	532	483	468	520	442	367	455	439	387		520	500	508	404	366	489	456	427
18	18	R-131	Info II:Art	327		439	675	684	621	654	568	582	544	529	530	479	471	429	429	520		579	608	503	459	543	591	455
19	19	R-132	" Law	310		413	620	589	512	617	542	539	515	515	509	480	473	450	404	500	579		572	485	407	508	505	429
20	20	R-133	" Health	368		467	675	609	545	652	567	596	596	533	504	484	524	493	473	508	608	572		520	417	504	518	396
21	21	R-134	" Engineering	296		441	570	470	436	521	461	506	494	448	466	491	525	460	397	404	503	485	520		345	410	416	357
22	22	R-135	" Architecture	217		276	478	499	449	478	447	406	406	371	387	336	336	311	306	366	459	407	417	345		381	421	372
23	23	R-136	" Journalism	260		322	571	570	532	559	501	468	444	445	459	397	401	357	370	489	543	508	501	410	381		467	406
24	24	R-137	" Foreign Travel	284		346	592	608	538	623	518	534	459	452	509	425	421	371	361	466	591	505	518	416	421	467		425
25	25	R-138	" Military	190		264	480	502	425	499	423	414	388	421	323	323	273	272	427	455	429	346	357	372	406	475		
26	26	R-139	" Acct,Bus,Sales	319		399	604	578	519	591	538	509	463	495	470	458	414	414	476	561	555	545	451	397	503	488	411	
27	27	R-140	" Pract.Knowl.	359		525	591	529	478	576	456	483	472	500	433	425	499	426	426	496	561	532	576	510	353	453	473	357
28	28	R-141	" Clerical	280		322	448	423	377	420	430	382	364	345	328	323	352	329	337	362	416	462	417	349	302	377	347	298
29	29	R-142	" Bible	269		379	575	601	482	603	518	520	503	473	450	370	401	414	376	435	529	510	517	419	393	454	478	421
30	30	R-143	" Colors	094		173	269	260	260	243	260	250	224	208	203	223	206	173	187	180	265	235	240	194	204	201	238	174
31	31	R-144	" Etiquette	179		228	327	293	272	305	328	284	246	285	237	241	239	222	213	286	290	265	282	249	223	252	250	231
32	32	R-145	" Hunting	126		233	261	158	111	230	139	230	306	248	216	230	364	388	193	176	165	214	227	260	137	118	180	153
33	33	R-146	" Fishing	142		249	298	238	207	250	214	271	315	245	270	259	329	326	265	233	259	270	289	288	186	190	188	178
34	34	R-147	" Outdr Act(Other)	325		487	644	557	488	597	529	569	553	525	507	497	554	509	455	515	565	535	590	535	395	465	488	379
35	35	R-148	" Photography	238		331	446	430	398	451	417	406	385	392	385	385	311	323	372	416	452	399	466	382	303	377	372	279
36	36	R-149	" Games	254		365	499	490	450	484	479	448	399	409	374	372	360	305	349	440	462	432	453	398	319	384	392	334
37	37	R-150	" Theater,ballet	311		400	628	628	585	586	538	493	485	488	484	424	442	389	400	494	629	563	565	444	408	541	532	426
38	38	R-151	" Foods	145		163	375	394	389	332	356	300	270	253	289	278	251	173	255	279	362	294	314	247	267	300	314	289
39	39	R-152	" Miscellaneous	319		439	637	611	555	624	505	569	517	495	506	482	472	424	410	505	593	542	586	481	433	496	525	439
40	40	R-162	" Vocabulary II	353		461	738	677	617	703	622	625	605	573	559	532	553	503	488	558	699	654	686	558	462	648	590	463
41	41	R-172	Vocab Tot. (I & II)	412		536	965	766	685	786	708	734	696	660	656	662	602	546	634	729	674	724	603	503	639	631	505
16	42	R-190	Info I Total	436		614	897	820	741	868	798	834	770	713	739	747	751	675	635	694	725	640	727	621	523	614	649	520
	43	R-192	Info II Total	409		557	824	789	700	801	710	714	691	657	652	602	636	585	553	647	810	758	786	667	586	670	702	598
	44	R-100	Info Total (I & II)	437		609	894	829	744	865	787	812	765	711	726	715	729	660	622	694	772	724	765	652	558	648	683	560
17	45	R-211	Memory for Sentences	199		236	282	225	178	249	217	238	238	254	204	187	249	254	216	217	227	251	257	207	149	180	172	137
18	46	R-212	Memory for Words	219		265	429	418	367	416	440	389	340	333	290	258	273	279	254	352	372	357	374	285	284	300	327	265
19	47	R-220	Disguised Words	316		379	597	571	540	523	528	485	451	461	413	387	417	370	355	464	545	462	503	390	372	450	417	344
20	48	R-231	English:Spelling	327		414	538	514	464	521	508	440	411	392	321	371	353	376	316	476	454	413	484	358	332	415	422	323
21	49	R-232	" Capitalization	338		443	470	424	357	466	395	408	390	406	323	329	400	384	309	414	404	371	425	352	261	328	345	246
22	50	R-233	" Punctuation	359		426	629	581	514	612	624	555	510	515	441	442	442	426	382	488	517	507	543	427	374	452	461	450
23	51	R-234	" Usage	347		439	569	547	461	552	519	509	481	485	426	413	462	445	361	456	494	475	519	410	341	416	443	321
24	52	R-235	" Eff. Exp.	306		376	519	486	427	503	463	436	424	479	382	347	399	385	348	442	449	445	461	373	304	334	388	293
25	53	R-230	" Total	422		527	684	632	550	662	623	586	552	567	471	462	514	501	427	567	578	548	605	482	401	495	511	380
26	54	R-240	Word Functions	254		293	550	535	484	526	629	502	467	447	405	397	353	354	325	433	450	448	473	355	384	412	418	347
27	55	R-250	Reading Comprehension	371		489	770	725	617	742	669	657	634	632	595	536	557	532	468	590	665	623	655	525	464	572	597	480
28	56	R-260	Creativity	281		365	607	552	513	523	534	532	502	486	507	528	520	436	415	413	540	483	507	464	384	439	450	359
29	57	R-270	Mechanical Reasoning	282		349	582	450	421	487	514	583	519	476	545	590	581	460	390	375	439	417	445	456	313	343	384	293
30	58	R-281	Vis. in 2 Dimens	210		245	357	302	282	317	343	344	291	321	283	299	333	276	239	292	312	264	278	293	222	237	254	197
31	59	R-282	Vis. in 3 Dimens	222		216	441	375	359	398	462	452	382	352	385	448	397	312	302	258	374	331	336	351	283	286	316	220
32	60	R-290	Abstract Reasoning	325		333	538	477	435	511	520	502	456	455	428	427	418	363	327	426	451	407	437	382	296	364	392	280
33	61	R-311	Math I	325		373	637	561	500	599	663	569	518	544	483	496	497	449	416	508	501	519	523	435	389	461	450	370
34	62	R-312	Math II	337		362	625	599	528	605	755	587	512	509	473	471	437	405	461	501	511	505	535	427	393	458	453	390
35	63	R-320	Math I & II	360		398	686	632	560	654	772	628	559	569	524	503	461	443	548	550	555	575	468	425	499	491	414
36	64	R-333	Math III	224		168	336	356	319	305	497	320	294	284	273	270	200	183	203	270	308	281	297	232	242	241	256	222
37	65	R-340	Math Total(I+II+III)	363		383	669	630	558	635	781	619	554	557	510	515	486	447	432	534	548	566	567	458	420	488	483	406
42	66	R-410	Arith Computation	335		467	448	407	369	468	453	362	325	395	258	274	332	357	317	486	374	368	421	345	281	321	322	261
43	67	R-420	Table Reading	173		177	188	197	143	167	184	140	111	155	105	113	130	116	128	195	178	150	172	149	130	119	163	115
44	68	R-430	Clerical Checking	160		140	107	143	152	102	115	056	031	073	014	027	034	020	069	135	122	077	090	064	092	080	104	078
45	69	R-440	Object Inspection	169		169	174	181	193	159	148	155	127	146	126	120	153	097	125	166	195	132	171	153	120	108	161	102
46	70	A-410	Arith Computation	194		239	221	217	206	235	274	189	132	192	110	129	147	181	161	284	193	194	220	172	164	165	168	159
47	71	A-420	Table Reading	-017		-088	-065	-053	-018	-101	-022	-081	-109	-072	-073	-078	-081	-087	-046	-092	-058	-075	-079	-074	000	-064	-033	-012
48	72	A-430	Clerical Checking	065		028	-020	027	052	-021	015	-041	-075	-034	-071	-052	-060	-069	-004	022	014	-021	-023	-023	-022	-007	005	003
49	73	A-440	Object Inspection	089		072	056	077	104	046	062	057	021	033	033	042	049	018	057	073	097	038	079	069	058	028	024	053
38	74	F-410	Arith Computation	273		418	412	356	310	426	355	321	333	367	260	260	327	324	286	393	335	324	372	316	228	288	285	204
39	75	F-420	Table Reading	239		314	327	305	264	316	257	261	252	271	229	249	225	209	302	287	267	300	267	166	217	241	160
40	76	F-430	Clerical Checking	282		307	327	318	289	312	271	237	240	265	188	182	226	202	190	307	290	248	285	220	196	228	263	201
41	77	F-440	Object Inspection	204		219	243	231	233	225	194	210	192	211	177	167	215	151	162	209	241	185	218	198	171	154	204	121
50	78	A-500	Preferences	007		118	-011	-012	-065	-021	-035	-032	-043	-038	-048	-029	-001	027	005	034	015	-019	011	020	008	-004	-013	038
51	79	R-601	BAI: Sociability	162		254	170	141	163	164	099	083	114	144	067	056	142	150	164	278	178	129	182	157	107	138	096	110
52	80	R-602	" Soc.Sensitivity	140		216	210	222	204	205	186	171	150	160	125	126	133	139	181	192	228	151	207	154	148	176	160	159
53	81	R-603	" Impulsiveness	028		079	041	063	046	027	028	011	022	011	027	026	023	020	046	058	057	049	042	024	033	041	029	087
54	82	R-604	" Vigor	147		230	234	203	194	223	174	173	185	188	142	178	191	206	189	317	211	177	226	205	126	181	156	157
55	83	R-605	" Calmness	152		252	274	246	237	255	253	231	216	221	205	220	216	224	245	249	259	210	256	219	173	214	178	194
56	84	R-606	" Tidiness	140		228	203	179	206	192	183	154	146	143	121	135	146	144	180	196	212	151	216	161	151	158	148	153
57	85	R-607	" Culture	114		211	173	187	213	179	183	143	128	124	106	121	122	137	166	171	200	151	177	150	160	151	119	124
58	86	R-608	" Leadership	-032		016	029	061	094	037	084	020	-001	005	026	-015	-041	-005	004	114	075	042	036	017	047	079	041	087
59	87	R-609	" Self-Confidence	153		262	258	212	200	237	236	214	200	200	203	214	225	193	210	218	225	196	224	205	166	177	174	170
60	88	R-610	" Mature Personality	136		233	232	220	218	236	256	201	176	172	140	149	181	174	191	183	217	191	230	199	171	183	164	172
89	89	F-701	Int Inv: Phys Sci	-046		-051	-198	-183	-201	-198	-326	-289	-221	-147	-251	-276	-141	-096	-137	-151	-179	-176	-169	-161	-145	-165	-144	-157
90	90	F-702	" Biol Sci & Med	-036		-038	-132	-159	-175	-137	-247	-183	-178	-086	-118	-036	-053	-110	-110	-153	-118	-145	-109	-106	-148	-111	-127
91	91	F-703	" Pub Serv	008		017	-001	-059	-050	-053	-052	014	020	007	034	066	100	063	-019	-069	-034	-040	002	029	-052	-070	-019	-074
92	92	F-704	" Lit-Ling.	042		062	-022	-134	-133	-073	-109	-023	-029	-002	010	058	139	071	-011	-067	-091	-064	-027	015	-086	-110	-053	-115
93	93	F-705	" Soc.Serv.	069		078	106	033	007	053	004	073	086	096	112	109	184	120	026	016	050	055	086	022	003	067	015
94	94	F-706	" Artistic	046		057	007	-072	-087	-011	-048	-027	-039	029	024	004	058	053	-025	034	-085	-004	-013	-027	-072	-042	-032	-037
95	95	F-707	" Musical	075		144	092	020	-018	082	007	069	061	100	137	062	162	148	058	115	019	073	069	060	059	-099	-061	014
96	96	F-708	" Sports	-075		-120	-067	-076	-077	-113	-078	-055	-061	-064	-057	037	-036	-090	-049	-322	-087	-084	-089	-079	-059	-099	-061	-014
97	97	F-709	" Outdr Rec.	-043		-109	-018	019	039	-022	047	-018	-076	-047	-031	-001	-093	-165	-051	089	000	-024	-043	-102	-102	-008	048	-015
98	98	F-710	" Bus.-Mgmt.	014		037	077	019	011	029	017	091	070	059	098	124	171	082	006	-036	023	014	041	041	-013	-019	048	-015
99	99	F-711	" Sales	035		059	094	033	024	057	032	093	102	080	127	158	097	027	-001	040	037	057	076	007	002	069	013
100	100	F-712	" Computation	029		051	043	005	027	-006	-107	016	045	034	028	014	082	064	-022	-043	013	-007	-005	017	-015	-011	033	013
101	101	F-713	" Office Work	139		160	241	200	144	206	149	204	198	212	214	194	219	163	101	158	194	165	169	151	105	124	196	115
102	102	F-714	" Mech-Tech	092		088	173	236	180	194	147	116	106	142	088	-022	-031	030	051	149	193	138	142	037	102	151	183	141
103	103	F-715	" Skilled Trades	152		176	291	278	223	272	230	244	215	240	134	142	169	149	130	190	256	213	221	161	143	186	244	154
104	104	F-716	" Farming	056		059	130	163	142	115	149	121	047	077	109	098	-002	-113	019	079	148	086	088	030	079	121	128	067
105	105	F-717	" Labor	202		242	340	319	280	325	283	287	274	271	234	227	179	204	246	318	261	285	217	187	234	284	191
106	106	C-001	Composite: I.Q.Comp.	401		487	784	721	627	750	721	688	648	653	607	574	585	542	484	610	661	627	657	539	466	569	590	466
107	107	C-002	" Gen.Acad.Apt.	434		529	812	748	656	770	793	711	660	662	604	588	600	561	508	637	678	647	689	560	487	588	602	477
108	108	C-003	" Verbal	371		568	835	798	662	773	715	690	654	645	588	559	598	569	502	640	694	643	696	558	486	595	611	473
109	109	C-004	" Quantitative	371		394	698	664	592	664	871	655	578	573	542	547	496	450	448	555	564	588	476	445	508	510	429
110	110	C-005	" Technical	365		505	798	653	598	712	690	857	705	620	717	856	812	620	547	522	615	593	636	599	439	505	557	432
				414		511	836	745	666	776	814	801	729	698	707	726	700	595	544	613	682	654	690	596	495	581	609	486

Table V-2c (continued)

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Acct.Bus.Sales	Pract.Knowl.	Clerical	Bible	Colors	Etiquette	Hunting	Fishing	Outdr Act(Other)	Photography	Games	Theater,Ballet	Foods	Miscellaneous		Vocabulary II	Voc.Tot.(I & II)	Info I Total	Info II Total	Info Tot (I & II)	Mem.for Sentences	Mem.for Words	Disguised Words	Spelling	Capitalization	Punctuation	Usage	Eff. Exp.	Eng. Total	Word Functions	Reading Comp.	Creativity	Mech.Reasoning	Code
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57		
319	359	280	269	094	179	126	142	325	238	254	311	145	319	353	412	436	409	407	199	219	316	327	338	359	347	306	422	254	371	281	282		

Table V-2c (continued)

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Var#	Var	Code	Description	Vis.in 2 Dimens 58	Vis.in 3 Dimens 59	Abstract Reason. 60	Math I 61	Math II 62	Math I+II 63	Math III 64	Math Tot(I+II+III) 65	Arith Computation 66	Table Reading 67	Clerical Checking 68	Object Inspection 69	Arith Computation 70	Table Reading 71	Clerical Checking 72	Object Inspection 73	Arith Computation 74	Table Reading 75	Clerical Checking 76	Object Inspection 77	Preferences 78	Sociability 79	Soc.Sensitivity 80	Impulsiveness 81	Vigor 82	Calmness 83
	1		Grade	210	222	325	325	337	360	224	363	335	173	160	169	194	-017	065	089	273	239	282	204	007	162	140	028	147	152
	2		Sex (1=M, 2=F)																										
1	3	R-101	Info I: Screening	245	216	333	373	362	398	168	383	467	177	140	169	239	-088	028	072	418	314	307	219	118	254	216	079	230	252
2	4	R-102	Vocab I	357	441	538	637	625	685	336	669	448	188	107	174	221	-085	-020	056	412	327	327	243	-011	170	210	041	234	274
3	5	R-103	Literature	302	375	477	561	599	632	356	630	407	197	143	181	217	-053	027	077	356	305	318	231	-012	141	222	063	203	246
4	6	R-104	Music	282	359	435	500	528	560	319	558	369	193	152	193	206	-018	052	104	310	264	289	233	-005	163	204	046	194	237
5	7	R-105	Soc.Studies	317	398	511	599	605	654	305	635	468	167	102	159	235	-101	-021	046	426	316	312	225	-021	164	205	027	229	255
6	8	R-106	Math	343	462	520	653	755	772	497	781	453	184	115	148	274	-022	015	062	355	257	271	194	-055	099	186	028	174	253
7	9	R-107	Phys. Sci	344	452	502	569	587	628	320	619	362	140	056	155	189	-081	-041	057	321	261	237	210	-032	083	171	011	173	231
8	10	R-108	Bio. Sci	291	382	456	518	512	559	294	554	325	111	031	127	132	-109	-075	021	333	252	240	192	-043	114	159	022	185	216
9	11	R-109	Sci Attitude	321	352	455	544	509	569	284	557	395	155	073	146	192	-072	-034	033	367	271	265	211	-038	144	160	011	188	221
10	12	R-110	Aero & Space	283	385	428	483	473	519	273	510	258	105	014	126	110	-073	-071	033	260	209	188	177	-048	067	125	027	142	205
11	13	R-111	Elec & Electron	299	448	427	496	471	524	270	515	274	113	027	120	129	-078	-052	042	260	223	182	167	-029	056	126	026	118	220
12	14	R-112	Mechanical	333	397	418	497	437	503	200	480	332	130	-034	153	147	-081	-060	049	327	249	220	215	-001	142	133	023	191	216
13	15	R-113	Farming	276	312	363	449	405	461	183	447	357	106	020	097	181	-087	-069	018	324	225	202	151	027	150	139	020	206	224
14	16	R-114	Home Ec	239	302	327	416	401	443	203	432	317	128	069	125	161	-046	-004	057	286	209	190	162	005	164	181	046	189	245
15	17	R-115	Sports	292	258	426	508	501	548	270	534	486	195	135	164	284	-052	022	073	393	302	307	209	034	278	192	058	317	249
18		R-131	Info II:Art	312	374	451	501	511	550	308	548	374	178	122	195	193	-058	014	097	335	787	290	241	015	178	228	057	211	259
19		R-132	Law	264	331	407	519	505	555	281	546	368	150	077	132	134	-075	-021	038	324	267	248	185	-019	129	151	049	177	210
20		R-133	Health	278	336	437	523	535	575	297	567	421	172	090	171	220	-079	-023	074	372	300	285	218	011	182	207	042	226	256
21		R-134	Engineering	293	351	382	435	427	468	232	458	345	149	064	153	172	-074	-023	069	316	267	220	198	020	157	154	024	205	219
22		R-135	Architecture	222	283	296	389	393	425	242	420	281	130	092	120	164	000	022	058	228	166	196	151	008	107	148	033	126	173
23		R-136	Journalism	237	286	364	461	458	499	241	488	321	119	080	108	165	-064	-007	028	288	217	228	154	-004	138	176	041	181	214
24		R-137	Foreign Travel	254	316	392	450	457	491	256	483	322	163	104	161	168	-033	065	074	285	241	263	204	-013	096	160	029	156	178
25		R-138	Military	197	220	280	370	390	414	222	406	261	115	078	102	159	-012	003	053	204	160	201	121	038	118	159	087	157	194
26		R-139	Acct,Bus,Sales	275	333	415	510	501	558	291	549	373	168	094	145	191	-055	-008	057	336	270	265	192	-013	175	186	064	192	246
27		R-140	Pract.Knowl.	289	325	422	469	449	497	206	476	411	194	111	199	195	-110	-014	078	387	360	321	262	021	217	187	037	230	239
28		R-141	Clerical	215	236	291	378	398	423	249	421	329	146	140	128	199	-002	063	068	259	189	235	153	034	150	169	057	179	219
29		R-142	Bible	253	296	389	484	489	529	271	520	348	133	112	119	195	-051	023	036	292	222	247	162	024	146	219	073	200	263
30		R-143	Colors	165	188	197	201	221	230	145	228	149	075	067	095	071	-009	018	057	140	104	137	110	-038	060	059	004	063	062
31		R-144	Etiquette	210	224	265	306	340	353	191	349	261	097	088	106	156	002	029	060	208	123	171	126	035	106	099	028	117	136
32		R-145	Hunting	130	137	140	193	129	170	060	163	127	035	-034	049	058	-046	-071	064	123	092	062	087	006	077	040	025	105	084
33		R-146	Fishing	138	136	178	216	181	213	102	206	151	060	017	073	090	-018	-019	036	121	095	086	091	067	093	066	064	149	112
34		R-147	Outdr Act(Other)	319	359	427	504	500	545	263	533	400	168	086	163	204	-079	-022	062	362	296	276	218	015	221	186	048	259	269
35		R-148	Photography	231	263	330	381	395	423	226	416	321	125	067	125	164	-063	-024	036	292	224	227	176	-006	151	173	034	171	226
36		R-149	Games	247	306	356	408	448	466	270	463	339	153	105	116	202	-037	021	066	268	232	233	170	002	179	164	082	219	204
37		R-150	Theater,ballet	261	318	411	482	499	534	275	524	372	164	119	161	197	-044	019	074	326	255	273	204	014	164	193	052	180	237
38		R-151	Foods	116	178	246	280	317	327	198	324	172	097	073	114	085	010	025	075	159	115	140	124	002	099	110	073	101	144
39		R-152	Miscellaneous	271	336	427	497	516	549	301	543	390	196	121	179	222	-033	024	077	321	284	268	175	029	176	196	051	214	238
40		R-162	Vocabulary II	321	404	502	592	584	638	295	619	415	191	098	173	197	-082	-024	062	392	327	310	237	-043	182	212	029	243	267
41		R-172	Vocab Tot. (I & II)	366	456	560	662	651	712	343	694	465	201	111	185	227	-090	-023	062	432	348	342	257	-024	186	225	039	253	289
42	16	R-190	Info I Total	399	497	589	696	700	758	343	745	501	202	109	196	258	-090	-024	071	449	349	338	265	-016	183	230	045	256	309
43		R-192	Info II Total	374	445	546	655	658	713	372	702	444	213	133	208	263	-073	-000	089	432	347	352	270	017	224	254	078	277	322
44		R-100	Info Total (I & II)	400	491	588	699	702	761	392	748	511	211	120	205	266	-086	-017	079	454	356	351	273	-005	202	244	057	270	321
17	45	R-211	Memory for Sentences	161	171	219	274	259	288	121	279	293	115	066	116	171	-019	007	053	234	167	159	144	017	081	061	-024	108	092
18	46	R-212	Memory for Words	240	259	345	407	449	468	253	463	374	164	124	147	245	019	041	076	277	190	238	177	027	129	135	017	148	151
19	47	R-220	Disguised Words	355	355	464	484	493	531	291	525	426	338	329	287	287	110	218	212	298	319	402	294	061	193	219	065	219	242
20	48	R-231	English:Spelling	242	261	382	488	516	547	309	543	491	201	201	141	294	-034	083	053	369	242	354	186	-007	178	202	034	211	207
21	49	R-232	Capitalization	279	298	414	455	458	496	226	484	481	177	102	183	280	-087	-006	071	390	315	280	200	-001	161	148	004	161	165
22	50	R-233	Punctuation	335	413	530	637	663	707	376	699	530	195	132	168	303	-083	-007	041	436	332	331	237	-079	136	178	-018	176	201
23	51	R-234	Usage	300	349	464	545	547	593	275	577	462	191	110	159	247	-080	-013	048	403	326	317	230	-031	119	143	-005	162	176
24	52	R-235	Eff. Exp.	243	343	448	516	494	546	251	530	349	151	068	154	188	-116	-045	028	377	311	275	232	-098	109	125	-035	146	147
25	53	R-230	Total	365	417	562	658	669	722	359	707	596	229	152	205	334	-100	006	066	500	394	387	284	-051	179	200	-006	214	225
26	54	R-240	Word Functions	320	420	476	569	627	654	381	695	415	163	120	177	244	-028	027	094	331	236	258	215	-076	102	178	-002	137	198
27	55	R-250	Reading Comprehension	393	481	583	660	652	712	355	675	482	204	129	208	245	-083	-008	080	435	345	358	275	-061	163	219	029	234	279
28	56	R-260	Creativity	385	483	490	534	513	567	291	556	352	194	107	212	179	-024	010	118	332	273	260	252	-025	125	174	025	177	238
29	57	R-270	Mechanical Reasoning	482	615	604	522	501	554	268	541	304	194	090	289	155	-018	-002	175	275	266	242	331	-064	061	098	-008	130	185
30	58	R-281	Vis. in 2 Dimens		480	442	348	354	382	174	370	303	239	210	320	184	035	130	233	236	269	275	336	008	090	083	-004	117	160
31	59	R-282	Vis. in 3 Dimens	480		558	454	460	497	237	486	268	172	096	284	115	-038	009	172	268	258	233	326	-099	010	057	-045	070	136
32	60	R-290	Abstract Reasoning	442	558		531	537	580	269	562	375	211	125	288	166	-078	011	141	370	349	306	356	-115	075	107	-026	130	162
33	61	R-311	Math I	348	454	531		691	897	373	863	506	175	086	135	288	-063	-020	027	419	288	268	204	-082	127	151	002	184	208
34	62	R-312	Math II	354	460	537	691		939	471	921	542	184	114	150	328	-054	006	044	425	290	287	212	-068	130	170	-001	179	226
35	63	R-320	Math I & II	382	497	580	897	939		468	973	571	196	110	155	337	-063	-006	040	453	314	303	226	-080	140	175	000	197	237
36	64	R-333	Math III	174	237	261	379	471	468		637	282	117	122	096	206	030	075	071	177	118	101	101	-043	052	118	029	087	142
37	65	R-340	Math Total(I+II+III)	370	486	562	863	921	973	637		559	196	124	159	339	-047	013	054	436	298	300	221	-079	132	180	008	191	238
42	66	R-410	Arith Computation	303	268	375	506	542	571	282	559		334	302	255	758	091	196	180	593	333	378	268	138	248	207	061	253	237
43	67	R-420	Table Reading	239	172	211	175	184	196	117	196	334		491	454	320	640	427	445	115	625	381	374	223	149	126	061	162	167
44	68	R-430	Clerical Checking	210	096	125	086	114	110	122	124	302	491		457	351	402	932	487	029	218	463	329	252	163	124	084	146	156
45	69	R-440	Object Inspection	320	284	288	135	150	155	096	159	255	454	452		226	233	387	867	112	343	365	907	140	131	095	058	140	130
46	70	A-410	Arith Computation	164	115	166	288	328	337	206	339	758	320	351	226		332	348	281	-074	073	184	134	234	187	160	108	174	183
47	71	A-420	Table Reading	035	-038	-078	-063	-054	-063	030	-047	091	640	402	233	332		471	474	-270	-199	059	027	303	073	053	108	050	079
48	72	A-430	Clerical Checking	130	009	011	-020	006	-006	075	013	196	427	932	387	348	471		438	-179	067	322	219	292	126	092	103	102	120
49	73	A-440	Object Inspection	233	172	141	027	044	040	071	054	140	445	487	867	281	424	438		-069	133	241	605	233	120	088	104	119	112
38	74	F-410	Arith Computation	236	268	370	419	425	459	177	436	593	115	029	112	-074	-270	-129	-069		421	350	246	-078	146	117	-041	171	135
39	75	F-420	Table Reading	269	258	349	288	290	314	118	278	333	625	218	343	073	-139	067	139	421		429	450	-023	115	106	-032	156	132
40	76	F-430	Clerical Checking	275	233	306	268	287	303	161	300	378	381	641	365	184	055	322	241	350	421		400	039	159	129	-001	167	155
41	77	F-440	Object Inspection	336	326	356	204	212	226	101	221	268	374	329	907	134	027	219	605	246	450	400		030	104	080	-004	126	113
50	78	A-500	Preferences	008	-099	-115	-082	-068	-080	-043	-079	138	273	252	140	234	303	292	233	-078	-023	039	030		181	137	262	131	165
51	79	R-601	SAI: Sociability	090	057	075	127	130	140	052	132	248	149	163	131	187	073	126	120	116	115	159	180	181		524	300	538	471
52	80	R-602	Soc.Sensitivity	083	057	107	151	170	175	118	180	207	126	124	095	160	053	092	068	117	106	129	080	137	524		289	504	589
53	81	R-603	Impulsiveness	-006	-045	-026	002	-001	000	029	008	061	061	124	058	108	103	104	104	-041	-032	-001	-004	262	300	289		275	210
54	82	R-604	Vigor	117	070	130	184	179	197	087	191	253	162	146	140	174	050	102	119	171	156	167	124	131	538	504	275		492
55	83	R-605	Calmness	160	136	162	208	226	237	142	238	237	167	156	130	183	079	120	112	155	137	155	113	165	471	589	210	492	
56	84	R-606	Tidiness	114	077	129	170	184	193	093	188	260	149	183	145	204	053	136	119	144	136	192	137	154	452	557	209	472	545
57	85	R-607	Culture	095	046	101	128	171	165	129	172	216	140	159	105	170	067	128	163	120	111	146	082	170	471	595	241	476	522
58	86	R-608	Leadership	-018	-034	-021	023	058	046	064	056	084	107	143	058	134	140	153	088	-040	-007	048	012	185	350	430	319	405	372
59	87	R-609	Self-Confidence	131	113	147	182	214	217	099	208	214	132	114	112	142	022	062	082	151	146	166	112	104	372	306	128	295	436
60	88	R-610	Mature Personality	104	104	131	200	229	235	143	236	279	152	172	126	161	130	103	165	160	131	199	170	165	466	622	273	556	610
	89	F-701	Int Inv: Phys Sci	-116	-214	-202	-226	-285	-282	-200	-288	-155	-077	-070	-057	-126	-020	-047	-053	-080	-077	-084	-047	-010	-090	-154	-023	-158	-182
90		F-702	Biol Sci & Med	-040	-086	-056	-106	-173	-156	-143	-167	-095	-066	-090	-055	-089	-020	-077	-061	-034	-064	-071	-053	-045	-131	-200	-061	-165	-180
91		F-703	Pub Serv.	045	026	015	-017	-048	-037	-143	-038	-052	-039	-087	-010	-071	-035	-091	-030	009	-015	-034	017	-063	-159	-157	-053	-091	-108
92		F-704	Lit-Ling.	052	023	-012	-027	-077	-059	-092	-071	-013	-026	-073	013	-044	-046	-075	-017	041	013	-032	041	-024	-088	-171	-067	-078	-098
93		F-705	Soc.Serv.	071	067	055	047	005	025	-026	019	-010	-030	-075	009	-063	-058	-100	-017	065	022	018	047	-061	-119	-179	-021	-081	-161
94		F-706	Artistic	-023	-109	-061	-020	-018	-008	-033	-013	053	-020	-030	-038	-060	-030	-030	-068	072	005	-000	-031	-028	-130	-125	-035	-022	-078
95		F-707	Musical	057	010	055	087	039	065	-017	052	115	016	-013	-011	032	-051	-035	012	138	072	040	017	004	022	-086	-029	038	-021
96		F-708	Sports	-066	-042	-092	-079	-089	-092	024	-065	-188	-011	-014	-081	-038	014	-005	-041	-029	-053	-026	-058	-067	-276	-154	-043	-308	-174
97		F-709	Outdr Rec.	-057	-018	-060	-008	023	011	037	020	-049	-030	-014	-062	-038	014	-005	-041	-029	-053	-026	-058	-067	-121	-060	-060	-165	-074
98		F-710	Bus.-Mgmt.	053	058	027	017	029	026	013	028	-024	-039	-072	-006	-048	-052	-086	-039	024	003	-017	013	-064	-182	-151	-068	-094	-096
99		F-711	Sales	076	075	044	045	034	042	025	043	-002	-018	-059	015	-030	-040	-076	-021	036	018	007	046	-050	-115	-088	-059	-037	-036
100		F-712	Computation	-010	-047	-028	-081	-112	-107	-067	-105	-114	-075	-046	-061	-124	-074	-091	-061	-019	-021	-030	007	-055	-107	-137	-019	-086	-119
101		F-713	Office Work	112	096	120	138	144	153	056	156	011	-016	052	-001	-076	-068	-014	146	091	103	098	-043	-002	-014	-015	033	023
102		F-714	Mech-Tech	046	002	093	108	167	153	100	157	105	055	052	072	031	-023	006	024	124	094	138	098	-036	005	045	030	047	065
103		F-715	Skilled Trades	019	100	166	191	231	232	130	232	159	067	080	054	062	-055	-030	017	136	063	135	124	-047	015	028	010	041	023
104		F-716	Farming	020	033	051	093	130	123	086	128	076	061	080	054	047	-018	054	038	059	059	097	057	003	015	028	010	-041	023
105		F-717	Labor	149	160	221	239	279	284	142	278	216	099	073	132	061	-058	-003	052	237	181	199	170	001	077	105	-028	096	123
106		C-001	Composite: I.Q.Comp.	453	567	774	806	725	826	388	802	529	229	136	243	269	-089	-007	096	477	383	373	320	-090	153	203	011	226	269
107		C-002	Gen.Acad.Apt.	435	536	671	813	833	895	444	875	606	246	148	221	334	-088	-000	079	515	395	391	301	-070	177	222	010	234	279
108		C-003	Verbal	389	460	601	706	717	774	390	754	585	238	155	215	317	-098	-003	071	565	404	401	295	-042	191	230	018	243	268
109		C-004	Quantitative	378	547	574	632	732	963	545	981	557	129	194	161	339	-041	016	057	414	340	331	263	-076	130	189	013	193	251
110		C-005	Technical	425	561	586	632	609	672	330	658	380	167	056	206	180	-086	-056	085	361	300	268	270	-043	104	164	019	189	259
111		C-006	Mech. Apt.	466	601	713	815	802	877	472	867	526	221	118	231	278	-079	-018	094	462	163	348	305	-074	144	205	016	224	287

Table V-2c (continued) 93

Column headers (diagonal labels, left to right):
Tidiness (84), Culture (85), Leadership (86), Self-Confidence (87), Mature Personality (88), Phys Sci. (89), Biol Sci & Med (90), Pub Serv. (91), Lit-Ling. (92), Soc. Service (93), Artistic (94), Musical (95), Sports (96), Outdr Rec. (97), Bus. Mgmt (98), Sales (99), Computation (100), Office Work (101), Mech-Tech (102), Skilled Trades (103), Farming (104), Labor (105), I.Q. Comp. (106), Gen Acad. Apt. (107), Verbal (108), Quantitative (109), Technical (110), Sci Apt. (111), MEAN, S.D., Code

84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	MEAN	S.D.	Code
140	114	-032	153	136	-046	-036	008	042	069	046	075	-075	-043	014	035	029	139	092	152	056	202	401	434	452	371	365	414	10.2173	1.0284	
																												1.4000	.0006	
228	211	016	262	233	-051	-038	017	062	078	057	144	-120	-109	032	059	051	160	088	176	059	242	487	529	568	394	505	511	11.0438	1.7003	R-101
203	173	029	258	232	-198	-132	001	-022	106	007	092	-067	-018	077	094	043	241	173	291	130	340	784	812	835	648	798	836	11.7169	4.2841	R-102
179	187	061	212	220	-183	-159	-059	-134	033	-072	020	-078	019	033	005	200	236	278	163	319	721	748	798	664	653	745	11.0711	4.5830	R-103
206	213	094	200	218	-201	-175	-050	-133	007	-087	-108	-077	039	024	-027	144	180	223	142	280	627	656	662	542	598	666	5.3299	2.9258	R-104

(Row codes continue down the right-hand column: R-105, R-106, R-107, R-108, R-109, R-110, R-111, R-112, R-113, R-114, R-115, R-131, R-132, R-133, R-134, R-135, R-136, R-137, R-138, R-139, R-140, R-141, R-142, R-143, R-144, R-145, R-146, R-147, R-148, R-149, R-150, R-151, R-152, R-172, R-190, R-192, R-100, R-211, R-212, R-220, R-231, R-232, R-233, R-234, R-235, R-230, R-240, R-250, R-260, R-270, R-281, R-282, R-290, R-311, R-312, R-320, R-333, R-340, R-410, R-420, R-440, A-410, A-420, A-430, A-440, F-410, F-420, F-430, F-440, A-500, R-601, R-602, R-603, R-604, R-605, R-606, R-607, R-608, R-609, R-610, F-701, F-702, F-703, F-704, F-705, F-706, F-707, F-708, F-709, F-710, F-711, F-712, F-713, F-714, F-715, F-716, F-717, C-001, C-002, C-003, C-004, C-005, C-006.)

Table V-3

Intercorrelations Among 111 Project Talent Variables for 15-Year-Old Girls

Table V-3a. Intercorrelations Among 111 Project Talent Variables for 15-Year-Old Girls
15-year-old girls in high school (10% Subsample. N=3829)

Var*	Var	Code	Description			Screening									Sci Attitude	Aero & Space	Elec & Electron	Mechanical	Farming	Home Ec	Sports	Art	Law	Health	Engineering	Architecture	Journalism	Foreign Travel	Military
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	1		Grade			160	250	341	225	235	263	086	270	206	058	061	140	150	185	180	256	195	266	132	162	202	166	118
	2		Sex (1=M, 2=F)																									
1	3	R-101	Info I: Screening	160			321	309	308	350	230	248	241	300	129	201	250	310	363	260	295	230	356	212	203	235	204	145
2	4	R-102	Vocab I	250		321		705	654	716	650	613	600	558	423	394	489	574	512	526	660	543	578	424	440	532	560	388
3	5	R-103	Literature	341		309	705		649	706	632	530	550	501	376	340	382	471	403	484	657	494	522	366	450	509	557	369
4	6	R-104	Music	225		308	654	649		640	576	502	485	441	359	326	394	455	428	496	596	437	500	346	404	468	498	330
5	7	R-105	Soc.Studies	235		350	716	706	640		626	607	568	520	371	371	425	536	478	520	633	512	544	375	430	511	569	360
6	8	R-106	Math	263		230	650	632	576	626		563	509	464	342	361	367	431	375	464	518	432	447	343	388	431	446	325
7	9	R-107	Phys. Sci	086		248	613	530	902	607	563		563	436	388	490	428	497	406	428	489	404	451	372	333	388	446	283
8	10	R-108	Bio. Sci	270		241	600	550	485	568	509	563		427	287	350	433	512	425	404	484	384	491	365	331	386	427	272
9	11	R-109	Sci Attitude	206		300	558	501	441	520	464	436	427		252	268	372	430	415	360	470	395	436	298	297	373	361	232
10	12	R-110	Aero & Space	058		129	423	376	359	371	342	388	327	252		334	322	241	254	304	372	304	282	258	245	290	327	226
11	13	R-111	Elec & Electron	061		201	394	340	326	371	361	490	350	268	334		364	317	275	295	310	251	302	299	211	267	296	161
12	14	R-112	Mechanical	140		250	489	382	394	425	467	428	433	372	322	364		507	435	375	378	322	384	375	251	321	320	221
13	15	R-113	Farming	150		310	574	471	455	536	431	497	512	430	291	317	507		487	434	459	390	467	369	330	377	390	248
14	16	R-114	Home Ec	185		363	512	403	426	478	375	406	425	415	254	275	435	487		359	404	351	445	337	308	338	330	206
15	17	R-115	Sports	180		260	526	484	496	520	464	428	404	360	304	295	375	434	359		457	394	410	327	317	348	405	292
	18	R-131	Info II: Art	256		295	660	657	596	633	518	489	484	470	372	310	378	459	404	457		486	519	372	430	471	540	334
	19	R-132	Law	195		230	543	494	437	512	432	404	384	395	304	321	322	370	351	394	486		408	307	327	346	405	284
	20	R-133	Health	266		356	578	522	500	544	447	451	491	436	282	302	184	467	445	410	519	408		342	342	423	405	259
	21	R-134	Engineering	132		212	424	366	364	375	343	372	365	298	258	299	375	369	337	327	372	307	342		268	306	290	211
	22	R-135	Architecture	162		203	440	450	404	430	388	333	331	297	245	211	251	330	308	317	430	327	342	268		305	360	245
	23	R-136	Journalism	202		235	522	509	468	511	431	388	386	373	290	267	321	377	338	398	491	396	423	306	305		400	266
	24	R-137	Foreign Travel	166		204	560	557	498	569	446	446	427	386	327	296	320	390	330	405	540	405	405	290	360	400		306
	25	R-138	Military	118		145	388	369	330	360	325	283	272	232	226	161	221	248	206	292	334	284	259	211	245	266	306	
	26	R-139	Acct,Bus,Sales	235		261	558	523	497	554	474	419	406	412	303	272	354	397	392	394	519	450	444	308	340	446	431	300
	27	R-140	Pract.Knowl.	180		348	443	407	390	424	343	313	339	372	218	223	322	350	380	347	453	362	422	295	273	346	342	205
	28	R-141	Clerical	341		265	375	346	336	373	300	248	283	269	155	201	275	291	325	285	364	270	368	245	218	305	271	190
	29	R-142	Bible	171		225	536	522	442	539	442	408	427	491	266	228	294	424	342	349	470	428	413	286	331	370	374	288
	30	R-143	Colors	170		173	424	400	410	382	372	332	339	298	201	191	235	307	315	294	380	317	342	248	288	308	326	194
	31	R-144	Etiquette	142		228	351	301	307	337	316	270	315	140	164	226	298	310	252	305	251	328	203	186	234	256	158	
	32	R-145	Hunting	055		062	120	080	070	078	075	107	123	081	081	098	152	144	124	125	098	089	105	150	082	074	072	045
	33	R-146	Fishing	017		061	066	054	058	041	056	053	050	039	067	077	096	078	051	075	056	060	058	110	068	035	043	030
	34	R-147	Outdr Act(Other)	182		266	532	468	460	449	450	444	441	411	300	305	387	441	423	434	498	391	454	366	290	354	394	242
	35	R-148	Photography	145		235	361	320	302	340	260	232	240	303	153	198	251	288	278	246	353	272	339	254	204	274	254	149
	36	R-149	Games	140		203	342	346	316	342	342	261	235	264	176	180	207	221	222	308	334	254	287	219	223	234	255	175
	37	R-150	Theater,ballet	251		295	630	606	575	573	489	416	442	428	318	260	325	403	373	463	603	469	485	317	371	473	479	312
	38	R-151	Foods	173		181	478	468	467	418	379	312	308	313	237	194	246	294	336	328	460	334	369	245	287	349	372	233
	39	R-152	Miscellaneous	217		304	568	559	523	564	489	465	437	432	321	299	339	415	405	401	553	422	484	320	368	427	439	289
	40	R-162	Vocabulary II	249		314	686	617	585	639	540	501	507	504	336	305	418	500	491	475	655	531	610	378	386	574	489	306
41	42	R-172	Vocab Tot. (I & II)	277		344	962	728	680	744	661	620	613	583	424	392	501	572	545	549	711	582	636	441	455	590	578	388
16	42	R-190	Info I Total	281		418	867	809	759	840	758	713	641	502	535	620	693	637	644	709	576	642	489	489	574	612	404
	43	R-192	Info II Total	312		392	809	764	708	771	659	609	611	589	430	399	503	602	558	589	805	661	708	528	549	620	651	460
	44	R-100	Info Total (I & II)	300		420	870	815	761	844	751	725	697	640	490	501	599	679	626	642	763	622	683	516	524	607	643	435
17	45	R-211	Memory for Sentences	090		187	299	254	222	276	260	268	238	239	138	162	177	230	211	197	254	228	256	168	172	197	204	127
18	46	R-212	Memory for Words	212		223	468	458	401	449	438	340	377	343	188	218	229	334	265	318	401	334	373	235	274	307	330	226
19	47	R-220	Disguised Words	255		290	551	518	505	483	471	366	373	416	254	218	311	349	362	353	507	358	453	287	328	395	405	251
20	48	R-231	English:Spelling	235		288	496	457	420	468	461	349	350	335	187	201	224	328	301	344	418	310	416	237	306	361	335	214
21	49	R-232	Capitalization	184		322	395	368	330	393	319	298	310	345	167	202	236	314	320	293	357	273	347	223	223	283	266	152
22	50	R-233	Punctuation	248		317	469	554	517	585	583	475	482	265	261	313	435	408	395	509	400	467	306	343	403	411	254
23	51	R-234	Usage	222		293	520	467	421	486	450	379	379	414	208	232	274	381	341	337	432	347	357	262	294	348	355	216
24	52	R-235	Eff. Exp.	220		242	452	407	383	415	373	308	312	404	193	162	229	318	320	272	399	325	357	274	252	316	321	179
25	53	R-230	Total	280		384	639	582	535	609	569	474	471	511	265	278	330	461	439	427	545	425	513	324	367	439	436	262
26	54	R-240	Word Functions	229		228	587	549	476	555	465	460	453	456	257	247	295	403	346	403	463	411	429	299	336	366	413	286
27	55	R-250	Reading Comprehension	302		360	747	704	624	720	616	553	574	583	353	317	417	546	464	488	663	524	429	399	426	526	530	339
28	56	R-260	Creativity	168		243	561	493	471	502	468	452	427	418	334	312	415	449	423	408	491	409	433	349	333	385	413	273
29	57	R-270	Mechanical Reasoning	153		194	475	388	401	449	435	409	382	318	269	384	385	374	355	405	331	338	327	271	281	350	220
30	58	R-281	Vis. in 2 Dimens	126		193	329	271	280	257	321	272	254	272	169	167	248	250	283	252	290	228	233	227	196	196	278	130
31	59	R-282	Vis. in 3 Dimens	139		161	402	360	362	362	412	291	344	310	236	320	331	344	292	359	289	289	275	245	241	266	163	
32	60	R-290	Abstract Reasoning	199		255	491	460	437	477	482	417	391	430	249	226	303	308	367	352	439	332	397	281	301	321	339	066
33	61	R-311	Math I	147		257	617	539	484	595	591	508	478	503	287	301	373	464	426	432	478	459	451	347	341	408	402	271
34	62	R-312	Math II	197		243	595	550	503	541	705	522	474	458	285	301	340	427	376	426	477	422	444	322	336	405	407	263
35	63	R-320	Math I & II	217		275	668	601	545	654	721	569	525	528	316	332	391	470	440	473	526	474	493	368	373	448	446	107
36	64	R-333	Math III	215		113	293	319	256	277	438	264	245	229	161	171	168	168	163	226	252	224	204	142	193	188	207	158
37	65	R-340	Math Total(I+II+III)	245		269	653	601	535	638	732	563	521	517	312	335	385	471	424	465	520	467	481	357	372	435	440	105
42	66	R-410	Arith Computation	168		359	422	365	355	438	440	361	312	340	155	231	237	350	316	351	349	273	378	265	242	314	271	183
43	67	R-420	Table Reading	182		165	118	130	118	120	131	076	096	083	056	056	062	111	122	150	081	117	090	067	108	102	060	
44	68	R-430	Clerical Checking	129		081	049	071	043	041	089	003	018	028	027	037	-012	-001	017	034	062	030	044	044	041	053	047	018
45	69	R-440	Object Inspection	133		161	130	136	138	118	108	087	101	109	080	057	089	074	145	140	166	097	133	118	101	106	103	074
46	70	A-410	Arith Computation	127		287	324	284	271	340	363	288	233	253	118	193	176	258	231	284	267	209	278	213	198	249	213	153
47	71	A-420	Table Reading	093		059	017	025	028	018	054	-001	016	-022	-001	006	-012	-019	011	052	037	001	001	024	004	018	037	031
48	72	A-430	Clerical Checking	063		023	-026	000	-031	027	-048	-034	-032	-003	002	-048	-110	-036	-022	-003	-003	008	-003	-004	-004	014	
49	73	A-440	Object Inspection	108		127	064	081	082	060	076	049	078	046	056	C36	063	018	015	100	103	044	071	081	068	061	061	048
38	74	F-410	Arith Computation	154		304	376	319	320	385	353	305	288	316	140	183	221	328	299	291	313	245	354	223	198	269	233	145
39	75	F-420	Table Reading	195		201	169	181	158	171	153	122	136	151	089	084	100	136	163	141	201	127	184	119	101	152	134	164
40	76	F-430	Clerical Checking	168		185	203	208	170	194	200	120	129	157	088	102	074	074	134	151	190	126	167	109	129	165	155	090
41	77	F-440	Object Inspection	137		170	169	170	172	152	165	122	142	154	087	076	109	121	166	157	201	123	176	135	112	129	123	087
50	78	A-500	Preferences	014		127	008	014	007	002	001	013	-033	003	-003	036	032	026	009	067	019	062	042	026	016	015	005
51	79	R-601	SAI: Sociability	118		191	076	065	108	059	063	008	029	075	012	032	037	064	085	102	072	021	098	069	035	077	040	030
52	80	R-602	Soc.Sensitivity	147		197	190	182	201	173	159	115	143	164	086	088	070	127	150	118	184	116	179	097	087	171	127	087
53	81	R-603	Impulsiveness	057		097	159	151	145	122	111	096	102	099	089	066	088	037	075	120	135	103	078	079	094	103	120	097
54	82	R-604	Vigor	097		145	162	132	171	124	138	098	110	067	071	123	155	130	167	123	064	154	142	065	111	086	068	
55	83	R-605	Calmness	116		171	182	142	172	160	172	123	126	146	086	110	115	133	159	132	154	112	164	131	083	147	107	099
56	84	R-606	Tidiness	096		172	113	089	122	105	095	068	061	069	017	039	056	130	068	098	028	146	087	066	097	064	050	
57	85	R-607	Culture	128		184	240	227	265	216	204	175	185	164	101	113	124	153	169	137	205	111	197	127	135	188	143	118
58	86	R-608	Leadership	045		070	100	104	145	047	133	063	080	032	032	028	039	050	096	080	050	063	057	062	089	052	088	
59	87	R-609	Self-Confidence	097		112	138	131	163	128	140	083	095	079	091	100	103	099	116	118	104	123	104	066	104	097	070	
60	88	R-610	Mature Personality	127		168	238	209	225	223	254	188	175	159	122	131	125	150	140	151	193	142	195	150	131	179	147	128
	89	F-701	Int Inv: Phys Sci	-046		043	-218	-200	-150	-222	-304	-237	-228	-138	-158	-132	-111	-108	-069	-129	-160	-140	-130	-123	-123	-136	-122
	90	F-702	Biol Sci & Med	-042		-004	-222	-215	-196	-205	-244	-210	-247	-124	-124	-048	-111	-123	-105	-140	-175	-119	-173	-125	-127	-144	-138	-124
	91	F-703	Pub Serv.	-020		055	-050	-091	-058	-100	-058	-100	-047	-058	-010	-032	-021	008	002	034	-054	-059	-014	-030	-061	-048	-046
	92	F-704	Lit-Ling.	-064		-026	-234	-260	-219	-242	-231	-188	-198	-159	-134	-102	-085	-144	-001	-148	-217	-163	-168	-095	-144	-189	-158	-127
	93	F-705	Soc.Serv.	-039		-017	-047	-043	-046	-061	-014	-026	-045	-049	033	-002	023	-024	-036	-036	-031	-014	-043	-019	-034	-058	-017	-053
	94	F-706	Artistic	-045		-025	-240	-244	-203	-208	-197	-186	-220	-165	-141	-100	-110	-154	-108	-107	-240	-122	-174	-129	-157	-165	-169	-035
	95	F-707	Musical	-012		023	-135	-141	-210	-119	-156	-131	-120	-056	-089	-072	-074	-089	-019	-059	-085	-065	-060	-062	-054	-077	-076	-064
	96	F-708	Sports	-039		-037	-139	-146	-126	-143	-140	-157	-129	-149	-088	-111	-071	-099	-128	-065	-125	-150	-085	-121	-101	-103	-115	-059
	97	F-709	Outdr Rec.	-003		-098	-103	-064	-076	-083	-042	-050	-041	-111	-067	-124	-127	-063	-082	-099	-094	-095	-066	-037	035	-024	
	98	F-710	Bus.-Mgmt.	-030		051	-006	-010	-001	-026	-035	011	-002	-003	018	-015	021	013	022	-017	-003	-007	023	005	-019	-025	014	-024
	99	F-711	Sales	-012		065	-002	007	017	-009	-022	-015	-001	003	-021	-008	015	017	-016	012	-006	012	025	-023	-009	005	-008
	100	F-712	Computation	-064		048	-041	090	067	009	-035	003	021	011	034	-028	-008	029	-018	096	024	035	012	038	014	083	028
	101	F-713	Office Work	044		039	-213	255	121	205	203	177	171	138	131	077	082	122	052	142	201	149	120	068	128	138	204	024
	102	F-714	Mech-Tech	031		141	011	028	045	023	015	-018	-026	030	-022	030	-032	012	032	024	042	-002	066	022	030	035	024	-008
	103	F-715	Skilled Trades	032		109	066	074	089	073	047	044	016	047	038	034	-019	033	037	055	083	049	082	049	026	024	056	027
	104	F-716	Farming	019		042	-079	-072	-043	-058	-049	-009	-119	-054	-128	-110	-068	-062	-064	-064	-058	-028	-093	035	-024	-028	-074	-044
	105	F-717	Labor	073		114	-085	115	120	092	068	046	034	086	038	C32	001	003	020	064	118	068	092	035	050	080	088	056
106		C-001	Composite: I.Q.Comp.	291		358	754	699	629	728	666	588	585	608	336	437	557	510	509	652	527	662	413	436	517	523	135
107		C-002	Gen.Acad.Apt.	303		381	792	721	656	751	753	616	600	614	368	365	448	572	524	536	644	544	604	421	421	447	539	542	351
108		C-003	Verbal	326		404	819	779	663	761	676	583	584	591	363	356	432	555	514	524	680	536	611	404	453	548	553	351
109		C-004	Quantitative	259		270	683	639	574	665	842	589	540	525	336	355	395	479	424	489	545	481	494	368	394	456	462	126
110		C-005	Technical	182		305	714	608	588	663	624	813	723	518	571	652	702	604	523	517	580	475	536	477	391	457	515	328
**	111	C-006	Sci. Apt.	276		352	800	725	666	767	763	773	717	672	617	459	475	556	609	547	561	668	555	603	466	454	535	560	367

Table V-3a (continued)　　　　95

	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
Code	Acct,Bus,Sales	Pract.Knowl.	Clerical	Bible	Colors	Etiquette	Hunting	Fishing	Outdr Act(Other)	Photography	Games	Theater,Ballet	Foods	Miscellaneous	Vocabulary II	Voc.Tot.(I & II)	Info I Total	Info II Total	Info Tot (I & II)	Mem.for Sentences	Mem.for Words	Disguised Words	Spelling	Capitalization	Punctuation	Usage	Eff. Exp.	Exp. Total	Word Functions	Reading Comp.	Creativity	Mech.Reasoning

26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	Code
235	18C	341	171	170	142	055	017	182	145	140	251	173	217	269	277	281	312	350	070	212	255	239	184	248	222	220	280	229	302	168	153	
261	348	265	225	173	228	062	061	266	235	203	295	181	304	314	344	418	392	420	187	223	290	288	322	317	293	242	384	228	360	243	194	R-101
558	443	375	534	424	351	120	066	532	361	342	630	478	568	666	962	867	809	870	299	468	551	436	395	409	520	452	639	587	747	561	475	R-102
523	407	346	522	400	301	080	054	468	320	346	606	468	559	617	728	809	764	815	254	458	518	457	368	554	467	407	582	549	704	473	388	R-103
497	390	336	442	410	307	070	058	460	302	316	575	467	523	585	680	759	708	761	222	401	505	420	330	517	421	383	535	476	624	471	401	R-104
554	424	373	539	382	337	078	041	499	340	342	573	418	564	639	744	849	771	844	276	449	483	468	393	585	486	415	609	555	720	502	424	R-105
474	343	300	442	372	316	075	056	450	260	342	489	379	489	540	661	769	659	751	260	438	471	461	319	581	450	373	569	615	616	468	444	R-106
419	313	248	408	332	290	107	053	044	232	261	416	312	465	501	620	758	609	725	268	380	366	349	298	475	379	308	474	460	553	452	435	R-107
400	339	283	427	339	298	120	123	050	441	240	235	407	308	437	613	715	611	697	238	377	373	350	310	463	379	312	471	453	574	527	403	R-108
412	372	269	411	298	315	081	039	411	303	264	428	313	437	504	583	641	589	640	239	343	416	335	345	482	414	404	511	456	583	418	382	R-109
303	218	155	366	201	140	081	067	300	153	176	318	237	321	336	424	502	430	490	138	188	254	187	167	265	208	193	265	257	353	334	318	R-110
272	223	201	228	191	164	098	077	305	198	180	260	194	299	305	392	535	399	501	162	218	218	201	202	261	232	162	249	247	317	312	269	R-111
354	322	275	294	235	226	152	096	387	251	259	325	246	391	481	481	620	503	595	179	229	311	224	236	311	279	229	336	295	417	415	384	R-112
397	336	291	424	307	298	144	078	441	288	227	403	294	475	500	592	693	602	679	230	339	349	328	314	435	381	318	401	403	546	449	385	R-113
392	380	325	342	315	310	124	051	423	222	373	336	465	431	481	537	558	626	211	285	362	301	320	408	141	320	439	346	484	423	374		R-114
394	347	285	349	294	252	125	075	434	246	308	463	328	401	475	549	644	589	642	197	318	353	344	293	395	337	272	427	403	488	408	355	R-115
519	453	364	470	380	305	098	056	498	351	334	663	460	553	655	711	709	805	763	254	401	507	418	357	409	432	399	545	463	663	491	409	R-131
450	361	270	428	317	251	089	046	391	272	254	460	334	422	531	502	576	661	622	228	334	358	310	273	409	347	325	427	411	524	409	331	R-132
444	422	368	413	342	328	105	058	454	339	287	485	369	484	616	636	642	708	683	256	373	453	416	347	467	399	357	513	429	574	433	338	R-133
308	295	245	286	248	203	150	110	366	254	219	317	245	320	378	441	489	528	516	168	235	287	237	223	306	262	214	324	290	399	349	327	R-134
340	273	218	331	288	186	042	068	290	204	223	371	287	368	386	455	489	549	513	172	274	326	306	223	343	294	252	367	338	420	333	271	R-135
440	346	305	370	308	234	074	035	354	274	234	473	349	427	514	590	574	620	607	197	307	395	361	283	403	348	316	439	386	526	385	281	R-136
431	342	271	379	320	256	072	043	394	294	255	479	372	433	464	578	612	651	643	204	336	405	359	266	411	355	321	436	413	530	413	353	R-137
400	205	170	288	194	158	045	030	242	149	175	312	233	289	309	308	404	460	435	127	226	251	214	152	254	216	174	262	286	339	273	220	R-138
	393	339	412	317	281	064	039	395	311	276	510	367	451	641	634	613	696	660	233	338	396	321	304	438	363	343	663	433	560	417	332	R-139
339	321		241	202	233	095	053	316	241	197	354	245	323	304	408	421	489	457	136	227	327	313	261	338	326	329	433	335	474	371	243	R-140
412	333	241		280	273	067	062	364	263	237	406	254	451	480	556	581	634	634	261	350	367	325	283	458	445	572	381	307				R-142
317	249	202	280		216	061	007	285	209	139	363	312	352	378	448	463	501	489	181	315	371	325	223	361	284	261	378	344	404	330	275	R-143
281	266	233	273	216		064		074	311	192	196	302	235	281	336	374	400	44C	125	156	242	282	252	236	180	284	260	316	315	367	268	264	R-144
068	076	095	067	063	064		074	122	074	070	066	047	091		116	141	186	161	052	071	055	061	056	078	063	049	083	046	093	134	043	R-145
039	067	053	062	009	016	074		083	077	034	019	028	064	047	064	047	136	105	027	019	055	039	074	023	020	063	023	050	051	022		R-146
375	396	316	364	285	311	122	083		297	308	445	339	437	557	584	608	665	646	204	304	372	249	299	417	344	318	436	393	522	422	408	R-147
111	281	241	263	209	132	074	074	297		217	319	223	493	375	388	461	425	144	227	300	261	325	307	275	370	268	398	271	220			R-148
276	283	197	237	199	196	070	034	308	217		299	750	290	335	367	391	451	423	158	235	272	234	209	278	244	216	310	269	335	277	253	R-149
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367	305	245	454	312	235	047	028	339	223	250	468		384	447	565	474	556	530	148	274	389	236	222	331	287	289	503	314	436	340	266	R-151
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641	468	384	480	398	336	084	047	557	375	335	618		859	730	790	772	267	425	524	458	395	548	468	424	590	525	687	503	414			R-162
634	408	408	556	448	374	116	064	584	595	367	676	505	618	859	885	867	903	311	489	585	521	426	635	542	471	672	610	784	584	470		R-172
613	500	421	581	463	400	141	084	608	380	341	648	474	640	730		885	995	327	509	574	518	445	661	550	471	687	634	798	622	548		R-190
696	568	489	684	501	440	186	116	665	461	451	737	556	715		867	866	953	325	497	600	520	441	636	538	484	678	601	802	611	503		R-192
660	546	457	634	489	425	161	105	646	425	423	698	530		172	903	955	253	336	519	656	670	561	489	702	640	822	635	566				R-100
233	216	136	241	181	156	052	027	204	164	158	218	148	244	267	311	327	325	336		380	240	259	275	331	291	251	367	271	334	282	201	R-211
338	276	227	150	315	247	071	017	194	227	215	376	274	182	425	489	509	497	519	380		409	429	354	434	343	314	514	455	494	386	292	R-212
306	358	327	367	371	282	064	055	372	300	272	445	399	424	524	565	574	600	599	240	409		536	355	540	477	419	597	565	608	468	384	R-220
351	303	313	340	325	252	061	015	299	261	234	410	296	386	466	521	518	520	533	259	429	536		440	584	487	422	742	495	527	360	264	R-231
304	331	261	263	223	236	056	034	299	261	209	332	222	336	395	426	445	441	456	275	325	355	449		947	496	418	757	336	440	320	267	R-232
438	338	338	458	361	368	078	023	417	324	248	468	331	471	548	635	661	636	610	331	454	540	584	547		610	512	871	615	652	476	438	R-233
363	326	264	370	284	284	063	020	344	307	244	423	247	368	466	542	550	538	561	291	393	417	407	446	610		490	794	460	547	405	346	R-234
343	329	261	303	261	260	049	003	318	275	216	385	289	363	424	477	471	484	489	251	343	433	422	418	512	410		683	397	526	346	305	R-235
463	433	378	458	378	364	033	031	436	370	310	519	364	494	516	672	687	678	702	367	514	597	742	757	671	734	683		599	692	494	420	R-230
433	335	242	445	344	319	046	023	393	268	269	440	314	434	525	610	634	601	640	271	455	505	435	336	615	460	397	599		654	476	424	R-240
560	474	381	572	404	367	013	050	522	394	335	620	436	573	687	784	798	802	822	134	494	635	527	440	652	447	520	642	654		614	502	R-250
417	371	291	189	336	268	134	051	422	271	277	455	340	441	523	564	622	611	635	282	386	488	386	320	476	405	344	494	476	614		436	R-260
132	293	223	307	275	264	091	022	408	220	253	349	266	372	414	490	548	500	546	201	292	384	244	267	438	348	305	420	424	502	478		R-270
236	253	201	215	207	215	074	032	285	221	221	263	184	230	274	334	375	362	381	162	211	341	242	226	339	269	227	334	308	369	370	457	R-281
270	248	189	292	275	232	091	014	318	201	214	303	225	315	364	422	480	431	476	162	282	347	242	242	310	288	302	431	482	447	555		R-282
358	336	255	441	330	271	065	005	370	256	248	389	300	393	501	561	521	565	238	368	463	376	372	541	430	396	552	513	585	476	510		R-290
484	369	300	441	338	328	084	042	426	291	270	456	463	544	639	679	633	661	313	445	451	450	400	497	487	430	516	604	636	491	447		R-311
432	330	270	440	346	315	046	033	422	282	307	453	314	475	516	613	680	618	677	291	455	450	460	411	624	485	402	629	626	605	464	437	R-312
503	387	311	466	378	354	094	041	468	316	324	502	362	516	583	689	750	690	749	332	497	498	519	448	678	536	457	687	680	684	526	487	R-333
253	172	161	197	178	155	076	035	217	123	207	243	176	220	221	290	352	321	351	127	232	242	217	172	231	179	264	322	286	253	246		R-340
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339	349	293	312	236	202	082	054	394	264	205	332	235	364	377	447	440	477	449	320	388	430	409	454	529	411	331	584	449	443	353	278	R-410
119	131	159	076	073	096	045	039	113	106	104	107	126	144	139	143	171	149	098	121	282	149	116	180	170	146	172	161	138				R-420
058	064	078	001	066	046	017	031	027	038	043	075	072	035	042	050	046	072	057	044	071	299	153	051	081	039	015	087	097	081	075	071	R-430
110	136	117	062	105	104	061	014	142	113	003	142	116	140	137	143	161	161	173	078	168	181	143	128	155	113	096	165	167	202	218	234	R-440
257	262	238	242	180	201	083	051	259	195	218	250	173	281	210	337	381	364	387	259	321	359	401	363	427	320	234	460	364	324	284	214	A-410
024	012	049	012	022	010	021	021	028	053	015	021	025	020	020	034	028	030	046	153	028	005	030	003	010	028	023	047	021	064	042		A-420
003	006	023	041	022	007	007	074	027	007	006	003	023	031	051	020	021	038	028	005	014	238	073	012	005	031	050	007	032	007	032	017	A-430
053	101	084	017	059	060	031	019	054	009	088	075	060	005	070	006	106	107	040	082	235	088	065	073	041	031	017	103	120	044	127	170	A-440
308	320	243	275	213	235	043	035	306	245	214	302	221	322	373	407	430	421	439	238	311	341	417	384	361	325	503	371	419	296	260	A-410
162	194	203	108	074	142	049	025	165	144	136	181	123	166	213	197	204	233	220	124	126	293	139	190	215	172	165	245	183	249	191	178	F-420
160	175	175	104	144	122	017	034	141	131	107	212	161	164	113	216	177	232	226	117	168	249	201	180	249	187	158	212	226	205	169		F-430
136	189	132	095	128	066	003	067	134	114	169	119	167	180	248	265	258	215	100	168	242	169	171	236	140	140	222	200	247	241	253		F-440
013	032	056	021	010	006	037	040	028	010	043	004	024	010	002	020	036	020	000	030	024	079	001	027	029	085	076	028	041	024			A-500
077	143	094	026	080	097	004	034	099	116	074	092	C83	088	076	090	088	111	018	073	062	134	113	123	104	098	076	109	078	083	078	056	R-601
147	152	144	141	124	104	007	033	133	107	183	130	154	146	206	220	171	097	130	203	165	125	132	263	156	207	137	084				R-603
123	076	085	123	086	065	041	033	110	085	104	152	097	106	108	162	156	171	165	051	072	110	048	022	161	051	044	054	073	118	045	074	R-604
104	139	101	105	096	102	053	010	127	123	073	129	047	155	158	156	145	106	063	155	134	106	163	133	098	160	126	154	126	120	094		R-605
089	113	136	049	071	088	003	038	074	122	089	095	086	085	110	128	121	126	127	069	085	125	161	110	103	114	077	022				R-606
167	171	155	176	151	127	027	048	149	136	081	193	162	181	213	249	259	253	264	106	151	151	170	133	210	194	223	155	065				R-607
087	070	062	069	072	073	002	027	069	051	053	088	007	076	080	131	113	118	110	070	075	126	101	018	053	035	057	108	075	064	034		R-608
115	159	092	116	073	090	054	038	118	103	092	114	074	120	116	148	162	162	163	070	102	157	126	098	142	112	074	146	122	137	124	097	R-609
206	159	158	112	141	147	045	044	099	177	130	186	214	248	265	258	215	165	195	230	220	161	118	234	217	227	171	091					R-610
-146	-049	-043	-211	-110	-040	-025	-021	-018	-033	-091	-097	-065	-156	-136	-205	-246	-192	-233	-087	-133	-084	-100	-064	-131	-086	-064	-097	-208	-199	-163	-179	F-701
-141	-081	-064	-127	-049	-060	006	-009	004	-059	-003	-127	-130	-181	-146	-218	-242	-217	-240	-087	-133	-123	-133	-028	-126	-093	-097	-120	-179	-211	-155	-132	F-702
-059	-019	-029	-073	-022	030	006	-009	004	-011	-034	-035	-006	-053	-027	-053	-041	-018	-031	-025	-041	-018	-050	008	003	004	-048	-046	-041	013			F-703
-182	-093	-093	-247	-115	-083	-013	-021	-111	-104	-075	-212	-124	-176	-193	-237	-249	-250	-266	-092	-159	-166	-165	-054	-163	-147	-126	-171	-207	-257	-170	-170	F-704
-349	-037	-033	-100	-024	-029	013	-022	-006	-036	-022	-056	-040	-055	-044	-048	-170	-065	-059	-042	-008	-063	-097	-011	-071	-116	-078	-039	-055				F-705
-143	-106	-077	-190	-141	-092	-022	-003	-028	-114	-104	-072	-194	-127	-166	-179	-230	-240	-234	-245	-086	-170	-150	-121	-061	-163	-134	-131	-162	-177	-230	-199	F-706
-072	-007	-014	-171	-044	-022	025	-014	-027	-021	-027	-103	-114	-087	-066	-017	-120	-150	-114	-011	-067	-086	-057	-037	-109	-110	-083	-078	-075				F-707
-099	-074	-057	-132	-069	-058	-056	-042	-135	-074	-094	-114	-053	-127	-109	-139	-175	-166	-176	-057	-086	-082	-086	-044	-021	-083	-058	-098	-131	-143	-078	-117	F-708
-033	-017	-012	-046	-018	004	023	020	-021	-023	-052	-051	-021	-021	-046	-003	-005	-008	-006	-016	-043	-012	-011	-017	-014	-052	-087	-104	-120				F-709
-041	013	002	-001	004	023	020	-021	-023	-007	006	024	-010	063	005	001	001	-013	-003	-004	-016	002	-043	011	-011	017	-014	-052	-087	-104	-120	023	F-710
-017	-004	-004	-021	034	027	013	-039	048	010	005	-011	000	032	024	003	024	052	034	-003	-002	056	-001	029	037	020	033	017	-030	035	-003	-022	F-712
120	080	047	-011	027	062	-020	-016	034	060	047	185	150	031	040	027	016	046	027	016	014	083	057	104	043	098	053	087	017	046	-005	-019	F-714
-039	-008	028	-087	-014	-019	-072	-030	-081	-024	-009	-029	-008	-050	-047	-073	-104	-076	-097	-007	-023	-027	-017	-012	-012	-017	-007	-002	-038	-074	-064	-126	F-715
078	085	091	047	047	055	024	-010	055	012	084	093	108	116	101	188	116	101	032	054	121	071	100	093	080	071	109	073	105	055	034		F-717
568	480	382	559	428	392	097	042	534	367	347	606	440	581	671	790	822	803	838	370	542	622	545	478	707	702	939	637					C-001
583	493	426	571	448	447	398	101	049	536	412	371	643	458	601	742	829	861	824	873	388	570	649	667	478	702	617	888	732	883	657	552	C-002
579	496	428	554	447	398	101	049	536	412	371	643	450	601	742	726	700	783	707	777	373	558	656	712	627	478	633	745	664	804	637	470	C-003
515	410	332	461	379	333	155	082	494	309	353	518	380	528	583	700	783	707	777	373	501	511	521	426	654	531	453	677	691	684	531	497	C-004
530	483	390	565	448	402	131	062	581	382	311	494	372	535	515	726	783	729	848	288	409	461	374	359	541	444	366	545	520	763	589	713	C-005
570	483	390	565	448	402	131	062	581	382	378	611	450	613	702	827	913	837	911	363	537	608	540	474	718	585	512	735	714	870	707	650	C-006

Table V-3a (continued)

Var*	Var	Code	Description	58 Vis.in 2 Dimens	59 Vis.in 3 Dimens	60 Abstract Reason.	61 Math I	62 Math II	63 Math I+II	64 Math III	65 Math Tot(I+II+III)	66 Arith Computation	67 Table Reading	68 Clerical Checking	69 Object Inspection	70 Arith Computation	71 Table Reading	72 Clerical Checking	73 Object Checking	74 Arith Computation	75 Table Reading	76 Clerical Checking	77 Object Inspection	78 Preferences	79 Sociability	80 Soc.Sensitivity	81 Impulsiveness	82 Vigor	83 Calmness
	1		Grade	126	139	199	197	197	217	215	245	168	182	129	133	127	093	083	108	154	195	188	137	014	118	147	057	097	116
	2		Sex (1-M, 2=F)																											
1	3	R-101	Info I: Screening	193	161	255	257	243	275	113	269	359	165	081	161	287	059	023	127	304	201	185	170	127	191	197	097	145	171
2	4	R-102	" Vocab I	329	402	491	617	595	668	293	653	422	118	049	130	324	017	-026	064	376	169	203	169	008	076	190	159	162	182
3	5	R-103	" Literature	271	360	460	539	550	601	319	601	365	130	071	136	284	025	000	081	319	181	208	170	014	065	182	151	132	142
4	6	R-104	" Music	280	362	437	484	503	545	256	535	355	118	043	138	271	028	-019	082	320	158	170	172	007	108	201	145	171	172
5	7	R-105	" Soc.Studies	247	382	477	595	591	654	277	638	438	120	041	118	340	018	-031	060	385	171	190	152	002	059	173	122	124	160
6	8	R-106	" Math	321	412	482	591	705	721	438	732	440	131	089	130	363	054	027	076	353	153	220	165	-001	063	159	111	138	172
7	9	R-107	" Phys.Sci	272	378	417	508	522	569	264	563	361	076	003	087	288	-001	-048	049	305	122	120	122	-006	008	115	096	098	123
8	10	R-108	" Bio.Sci	254	349	391	478	474	525	245	521	312	096	018	115	233	016	-034	078	288	136	129	142	013	029	143	105	117	126
9	11	R-109	" Sci Attitude	272	344	430	503	458	528	229	517	340	083	028	109	253	-022	-032	046	316	151	157	154	-033	075	164	099	110	146
10	12	R-110	Aero & Space	169	219	249	287	285	316	161	312	155	056	027	080	118	-001	-003	056	140	089	088	087	-003	012	086	089	067	086
11	13	R-111	Elec & Electron	167	230	226	301	301	332	171	335	231	056	037	047	193	006	002	036	183	084	102	076	030	032	088	066	071	110
12	14	R-112	Mechanical	248	320	303	373	340	391	168	385	237	056	-012	089	176	-012	-048	063	221	100	074	109	032	037	070	088	123	115
13	15	R-113	Farming	250	331	368	464	427	490	168	471	350	062	-061	079	258	-039	-110	038	328	136	074	121	026	064	127	087	155	133
14	16	R-114	Home Ec	283	344	367	426	376	440	163	424	316	111	017	145	231	011	-036	095	299	163	134	166	009	085	150	075	130	159
15	17	R-115	Sports	252	292	352	432	426	473	226	465	351	122	034	140	284	052	-022	100	291	141	151	157	047	102	118	120	167	132
	18	R-131	Info II:Art	290	359	439	478	477	526	252	520	349	150	062	166	267	037	-003	103	313	201	190	201	019	072	184	135	123	154
	19	R-132	" Law	228	289	332	439	422	474	224	467	273	081	030	097	209	001	-017	049	245	127	126	123	004	021	110	103	064	112
	20	R-133	" Health	233	289	397	451	444	493	204	481	378	117	044	133	278	001	-016	071	354	184	167	176	022	098	179	078	154	168
	21	R-134	" Engineering	227	275	281	347	322	368	142	357	265	090	044	118	213	024	008	081	223	119	109	135	042	069	097	079	142	131
	22	R-135	" Architecture	196	245	301	341	336	373	193	372	242	067	041	101	198	004	-003	068	198	101	129	112	020	035	087	094	065	083
	23	R-136	" Journalism	196	241	321	408	405	448	188	435	314	108	053	106	249	018	-004	061	269	152	165	129	016	077	171	103	111	147
	24	R-137	" Foreign Travel	228	264	339	402	407	446	207	440	271	108	047	103	213	037	-008	061	233	134	155	123	015	040	127	120	086	107
	25	R-138	" Military	130	163	206	271	283	307	158	305	183	060	018	074	153	031	-016	048	145	064	090	087	005	030	087	097	068	099
	26	R-139	" Acct,Bus,Sales	236	290	358	484	432	503	253	500	339	118	058	110	257	024	003	053	308	162	160	136	013	079	147	123	104	143
	27	R-140	" Pract.Knowl.	253	248	336	369	336	387	172	378	349	131	064	158	262	012	006	101	320	194	175	189	032	143	152	076	139	154
	28	R-141	" Clerical	201	189	255	300	270	313	161	311	293	159	078	117	238	048	023	084	243	203	175	132	016	094	144	085	101	128
	29	R-142	" Bible	215	282	341	441	440	486	197	470	312	076	003	062	242	012	-041	017	275	108	104	095	021	026	141	123	105	129
	30	R-143	" Colors	207	275	330	338	346	378	176	369	236	073	060	105	180	022	022	059	213	094	144	128	010	080	124	086	096	091
	31	R-144	" Etiquette	210	232	291	328	315	354	155	347	262	096	046	104	201	010	007	060	235	142	122	125	006	097	104	065	102	121
	32	R-145	" Hunting	074	091	065	084	086	094	076	100	082	045	014	061	083	021	007	046	043	049	039	066	039	004	009	041	053	044
	33	R-146	" Fishing	032	014	005	042	033	041	035	049	054	039	031	014	051	023	024	002	035	039	034	009	040	034	044	033	030	054
	34	R-147	" Outdr Act(Other)	285	318	370	426	422	468	217	462	339	113	027	147	259	013	-027	089	306	165	141	167	029	099	132	110	112	140
	35	R-148	" Photography	201	201	256	291	282	316	128	311	264	106	038	113	195	023	-009	063	246	144	131	134	028	116	133	085	123	109
	36	R-149	" Games	221	214	248	278	307	324	207	332	265	104	043	093	218	028	006	056	214	136	109	114	-010	074	107	104	073	091
	37	R-150	" Theater,ballet	263	303	389	456	453	502	243	496	332	149	075	142	250	055	003	088	302	181	212	169	043	092	183	152	123	146
	38	R-151	" Foods	184	225	300	345	314	362	176	358	235	110	072	110	173	051	023	075	271	123	161	119	004	083	130	097	097	094
	39	R-152	" Miscellaneous	236	315	393	463	475	518	229	507	364	120	033	140	281	025	-031	086	322	164	168	167	024	088	154	108	153	135
	40	R-162	" Vocabulary II	274	369	463	544	516	583	223	563	399	149	042	137	290	021	-031	065	379	213	193	180	-010	096	191	108	158	179
16	41	R-172	Vocab Tot. (I & II)	334	422	520	639	613	689	290	671	447	139	050	143	337	020	-030	070	407	199	216	187	002	090	206	152	173	195
	42	R-190	Info I Total	375	480	561	679	680	750	352	740	490	143	046	161	381	071	-034	096	430	204	213	203	020	088	206	156	180	203
	43	R-192	Info II Total	362	431	529	633	618	690	321	679	477	171	072	181	369	038	-009	106	421	233	232	221	036	111	220	171	178	206
	44	R-100	Info Total (I & II)	381	476	565	681	677	749	351	739	499	157	057	173	367	028	-026	102	439	220	226	215	036	098	217	165	184	209
17	45	R-211	Memory for Sentences	162	162	238	313	299	332	127	323	300	098	044	078	250	030	005	040	238	124	117	100	030	073	099	051	083	062
18	46	R-212	Memory for Words	211	282	368	445	455	497	232	491	388	121	071	140	321	066	014	082	311	126	178	168	024	062	130	072	095	116
19	47	R-220	Disguised Words	341	342	463	451	450	498	244	492	430	282	299	289	359	153	218	235	341	293	379	292	079	134	203	110	155	169
20	48	R-231	English:Spelling	214	242	376	450	486	519	217	503	499	169	153	143	401	066	073	086	417	199	216	169	032	113	185	048	134	156
21	49	R-232	" Capitalization	220	238	372	400	411	448	172	433	454	124	051	128	363	005	-012	065	384	190	180	171	001	123	125	022	106	112
22	50	R-233	" Punctuation	339	414	543	599	624	676	291	629	529	155	081	155	422	030	-005	073	448	215	249	206	-027	164	185	061	143	163
23	51	R-234	" Usage	269	310	430	487	485	536	234	524	411	116	039	113	320	010	-031	041	361	172	187	162	-026	098	155	051	133	138
24	52	R-235	" Eff. Exp.	227	288	396	430	402	457	179	446	331	087	015	096	234	-028	-056	031	325	165	158	140	-055	076	132	044	090	098
25	53	R-230	" Total	334	392	552	615	629	687	284	668	584	170	087	165	460	023	-007	077	503	245	273	222	-017	136	203	059	160	175
26	54	R-240	Word Functions	308	431	513	604	626	680	322	674	449	146	097	167	364	047	032	103	371	183	212	200	028	078	156	073	126	154
27	55	R-250	Reading Comprehension	369	482	585	638	605	684	286	667	443	172	081	202	324	021	-007	120	419	249	256	247	-016	083	207	118	154	178
28	56	R-260	Creativity	370	449	476	491	464	526	253	518	393	161	095	218	284	064	032	164	296	191	205	241	041	078	137	085	126	141
29	57	R-270	Mechanical Reasoning	457	555	530	447	437	487	240	483	778	138	071	234	214	042	017	170	246	178	168	253	-028	056	084	074	128	094
30	58	R-281	Vis. in 2 Dimens		472	422	327	339	369	203	360	311	208	147	302	267	100	106	259	243	229	191	302	066	058	065	063	102	096
31	59	R-282	Vis. in 3 Dimens	472		535	430	438	479	233	476	262	137	071	249	200	041	018	187	237	176	165	266	-057	-001	073	066	098	097
32	60	R-290	Abstract Reasoning	422	535		508	510	562	250	551	366	143	073	240	259	016	-006	153	358	211	229	282	-072	052	112	027	112	106
33	61	R-311	Math I	327	430	508		638	885	309	849	475	117	025	113	372	024	-043	037	413	161	159	153	-039	064	144	096	102	144
34	62	R-312	Math II	339	438	510	638		924	409	904	530	143	056	145	439	052	-010	084	424	175	186	184	-015	059	147	078	128	161
35	63	R-320	Math I & II	368	479	562	885	924		401	970	558	145	047	144	451	044	-027	069	463	186	197	187	-029	067	161	096	128	169
36	64	R-333	Math III	203	233	250	309	409	401		517	244	098	109	121	232	089	081	102	149	067	134	119	-003	037	077	047	054	104
37	65	R-340	Math Total(I+II+III)	368	476	551	849	904	970	577		544	150	066	153	448	059	-007	083	440	179	206	191	-020	072	164	096	124	174
42	66	R-410	Arith Computation	311	262	366	475	530	544	244	544		285	195	242	885	184	130	240	716	768	276	254	158	262	195	072	191	202
43	67	R-420	Table Reading	208	137	143	117	143	145	098	190	285		449	445	286	789	414	440	154	799	370	386	227	125	115	069	120	122
44	68	R-430	Clerical Checking	147	071	073	025	056	047	107	066	195	449		420	250	425	956	449	024	289	750	336	232	107	106	066	089	125
45	69	R-440	Object Inspection	302	249	240	113	145	144	121	153	242	445	420		254	338	384	914	112	167	355	931	213	133	050	052	109	106
46	70	A-410	Arith Computation	262	200	259	372	439	451	232	448	885	286	250	254		263	220	257	309	192	232	227	220	186	184	088	185	207
47	71	A-420	Table Reading	100	041	024	052	054	044	089	059	184	789	425	338	263		447	416	-018	261	228	222	246	091	089	077	098	099
48	72	A-430	Clerical Checking	106	018	-006	-043	-010	-027	081	-007	130	414	956	384	220	447		443	-064	214	524	280	264	093	086	073	077	109
49	73	A-440	Object Inspection	259	187	153	037	084	069	102	083	200	440	449	914	257	416	443		024	284	308	779	266	124	091	059	111	101
38	74	F-410	Arith Computation	243	237	358	413	424	463	149	440	716	154	024	112	309	-018	-064	024		760	216	178	-006	133	121	016	112	102
39	75	F-420	Table Reading	229	176	211	161	175	186	067	174	268	799	289	307	192	261	214	284	260		359	389	117	118	094	033	104	096
40	76	F-430	Clerical Checking	191	165	229	169	186	197	134	206	276	370	750	355	232	228	524	300	216	357		345	080	104	115	028	087	118
41	77	F-440	Object Inspection	302	246	282	153	184	187	113	191	254	386	336	931	227	222	280	779	178	389	345		141	125	079	042	105	102
50	78	A-500	Preferences	066	-057	-072	-039	-015	-029	020	-026	158	227	232	213	220	246	264	266	-006	117	080	141		185	145	218	144	133
51	79	R-601	SAI: Sociability	058	-061	052	064	059	067	037	072	202	125	107	133	186	091	093	129	133	108	104	125	185		525	248	536	432
52	80	R-602	" Soc.Sensitivity	065	073	112	144	147	161	077	164	195	115	106	092	184	089	086	091	121	014	115	079	145	525		220	455	666
53	81	R-603	" Impulsiveness	063	066	023	096	078	096	047	046	072	069	066	052	088	077	073	059	016	033	028	042	218	248	220		252	132
54	82	R-604	" Vigor	102	098	112	162	128	128	054	124	191	120	089	108	185	088	077	111	012	104	087	105	144	536	455	252		417
55	83	R-605	" Calmness	096	097	106	144	161	169	104	174	202	122	125	106	207	099	109	101	162	096	118	102	133	432	666	132	417	
56	84	R-606	" Tidiness	036	013	050	078	087	091	036	087	198	118	116	099	186	090	101	099	126	048	112	087	137	403	526	075	400	526
57	85	R-607	" Culture	063	068	116	172	180	195	091	173	202	101	104	078	187	077	087	071	132	086	109	076	148	451	624	200	449	573
58	86	R-608	" Leadership	038	041	048	086	106	107	068	110	145	101	135	078	167	118	135	095	047	063	087	061	113	370	402	259	396	391
59	87	R-609	" Self-Confidence	081	070	078	111	119	128	071	128	161	088	127	091	156	061	110	084	096	079	105	087	104	403	302	127	322	412
60	88	R-610	" Mature Personality	083	050	010	201	246	250	126	251	266	117	131	087	206	050	070	114	084	097	127	076	107	396	607	162	481	663
	89	F-701	Int Inv: Phys Sci	-107	-192	-139	-206	-254	-256	-166	-259	-095	-009	-033	-012	-044	-027	-025	-005	-052	012	-040	-015	-013	043	-064	-070	-106	-104
	90	F-702	" Biol Sci & Med	-055	-113	-113	-149	-184	-186	-122	-188	-079	-029	-053	-034	-076	-021	-034	-030	-048	-024	-074	-035	-028	-055	-148	-072	-178	-148
	91	F-703	" Pub Serv.	-012	-019	007	-049	-077	-071	-054	-072	-027	004	-039	-007	-041	-014	-036	-005	006	020	-031	-006	-040	-070	-094	-072	-078	-090
	92	F-704	" Lit.-Ling.	-062	-104	-099	-180	-190	-205	-103	-204	-102	-006	-031	-018	-100	000	-014	-004	-057	-010	-059	-028	-059	-094	-215	-147	-151	-166
	93	F-705	" Soc.Serv.	004	-011	-027	-073	-107	-101	-060	-104	-090	-036	-061	-034	-084	-021	-034	-016	-053	-035	-039	-039	-044	-168	-214	024	-147	-176
	94	F-706	" Artistic	-114	-209	-185	-167	-167	-184	-101	-183	-076	-004	-014	-004	-063	007	008	-003	-059	-014	-059	-095	-022	-041	-141	-104	-106	-115
	95	F-707	" Musical	-052	-077	-051	-073	-110	-103	-074	-132	-042	038	001	-009	-045	015	005	-011	-019	044	-015	-005	-011	-014	-133	-051	-103	-112
	96	F-708	" Sports	-105	-119	-135	-116	-135	-140	-083	-139	-102	-034	-019	-054	-093	-025	-006	-003	-046	-029	-046	-059	-048	-131	-091	-106	-234	-087
	97	F-709	" Outdr Rec.	-054	-107	-078	-064	-072	-075	-040	-071	006	006	012	-022	000	005	013	-010	011	005	008	-024	-033	013	-031	-085	-135	-030
	98	F-710	" Bus.-Mgmt.	015	-015	015	-025	-032	-040	-022	-035	-025	002	-022	-010	-024	003	-018	-004	-002	012	-023	-013	-038	-140	-110	-062	-068	-083
	99	F-711	" Sales	041	-019	017	-024	-007	-016	-017	-021	045	039	003	013	009	019	002	009	017	042	005	015	-011	-029	-010	-017	-021	-013
	100	F-712	" Computation	-046	-063	-020	-071	-068	-077	-028	-075	-108	-036	-046	-022	-106	-042	-042	-016	-061	-015	-039	-021	-016	-022	-014	041	-033	-069
	101	F-713	" Office Work	017	-006	083	112	140	141	099	145	-007	-012	-017	000	-008	-000	016	-002	-003	-018	-007	005	015	-060	031	082	015	016
	102	F-714	" Mech-Tech	004	-052	035	-003	008	003	-011	007	081	054	029	058	066	006	016	049	066	079	050	062	001	091	054	-034	-002	053
	103	F-715	" Skilled Trades	011	-023	042	-032	043	042	017	045	501	018	033	500	051	009	007	010	069	063	039	041	-014	-025	-032	-006	021	
	104	F-716	" Farming	-050	-123	-070	-078	-044	-065	-024	-057	039	043	070	-000	037	037	065	010	031	033	058	-003	-010	079	014	-046	-088	011
105	105	F-717	" Labor	037	005	069	053	053	049	028	052	093	050	049	082	093	050	044	062	080	079	066	042	004	104	079	-003	042	077
	106	C-001	Composite: I.Q.Comp.	431	559	777	795	680	808	326	784	498	176	077	221	368	023	-017	127	465	253	266	271	-041	082	195	104	152	176
	107	C-002	" Gen.Acad.Apt.	418	526	672	795	808	886	377	864	594	186	081	214	464	017	-011	109	518	256	277	255	-007	108	214	105	171	199
	108	C-003	" Verbal	362	441	591	681	684	753	327	736	572	174	084	173	446	026	-011	085	500	249	276	228	-007	125	224	111	178	195
	109	C-004	" Quantitative	377	483	561	805	919	958	594	976	549	155	078	168	454	060	005	090	440	181	214	197	-015	069	167	102	136	182
	110	C-005	" Technical	392	511	523	582	574	637	304	632	386	118	035	165	300	014	-028	113	338	173	166	147	003	043	137	121	147	155
**	111	C-006	" Sci.Apt.	453	584	710	809	787	879	434	872	530	174	076	214	413	039	-011	131	464	235	249	259	-017	077	189	120	163	191

Table V-3a (continued)

Column headings (diagonal labels, left to right): Tidiness (84), Culture (85), Leadership (86), Self-Confidence (87), Mature Personality (88), Phys. Sci. (89), Biol. Sci & Med. (90), Pub. Serv. (91), Lit-Ling. (92), Soc. Service (93), Artistic (94), Musical (95), Sports (96), Outdr. Rec. (97), Bus. Mgmt (98), Sales (99), Computation (100), Office Work (101), Mech-Tech (102), Skilled Trades (103), Farming (104), Labor (105), I.Q. Comp. (106), Gen. Acad. Apt. (107), Verbal (108), Quantitative (109), Technical (110), Sci. Apt. (111), MEAN, S.D., Code.

84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	MEAN	S.D.	Code
096	128	045	097	127	-046	-092	-020	-064	-039	-045	-012	-039	-003	-030	-012	004	044	031	032	019	073	291	303	326	259	182	276	10.4772	.5376	
																												2.0000	.0000	
179	184	070	112	168	043	-004	055	-017	-025	023	-037	029	051	065	048	039	141	109	042	114		358	381	404	270	305	352	11.5161	1.0970	R-101
113	240	100	138	238	-218	-222	-061	-234	-047	-220	-135	-139	-089	-006	-022	041	213	011	066	-079	085	754	792	819	683	714	800	10.8524	4.0485	R-102
089	227	104	131	209	-200	-215	-091	-260	-043	-244	-141	-146	-103	-010	007	090	255	028	074	-072	115	699	721	779	639	608	725	11.1933	4.2818	R-103
122	265	145	163	225	-159	-196	-058	-219	-046	-203	-210	-126	-064	-001	017	067	211	045	089	-043	120	629	656	663	574	585	667	6.1143	2.8667	R-104
105	216	097	128	223	-222	-205	-100	-242	-061	-208	-119	-140	-076	-026	-009	009	205	023	073	-058	092	728	753	740	665	663	763	12.2753	4.9942	R-105
095	204	133	140	254	-304	-244	-100	-231	-104	-197	-156	-157	-083	-035	-022	-035	203	-015	047	-049	068	666	753	676	842	624	773	7.1961	4.2771	R-106
068	175	063	083	188	-237	-210	-047	-188	-026	-186	-131	-129	-102	011	-015	003	177	-018	044	-089	046	588	616	583	589	811	717	6.9437	3.5174	R-107
063	185	059	095	175	-228	-247	-058	-198	-045	-220	-120	-149	-146	-002	-001	021	177	-026	016	-119	034	585	600	584	540	723	672	5.2740	7.3318	R-108
069	164	080	115	159	-137	-124	-010	-159	-049	-165	-056	-088	-051	-003	004	011	138	030	047	-057	086	608	614	591	525	518	617	5.0111	1.9667	R-109
017	101	032	079	122	-158	-124	-032	-134	033	-141	-089	-111	-111	018	003	034	131	-022	038	-104	038	360	368	363	336	571	459	2.6284	1.6311	R-110
071	113	032	091	131	-132	-098	-021	-102	-002	-100	-072	-071	-067	-015	-021	-028	077	-000	034	-054	032	330	365	356	355	652	475	5.2332	2.4846	R-111
039	124	028	100	125	-111	-111	008	-085	029	-110	-074	-099	-124	021	-008	-008	232	-032	019	-128	001	437	448	432	395	702	556	7.1055	2.8436	R-112
058	153	039	103	150	-108	-123	-002	-144	-024	-134	-089	-128	-127	015	015	029	122	012	033	-150	003	557	572	555	479	604	609	6.7292	2.5816	R-113
130	169	060	099	180	-069	-105	034	-061	-106	-108	-019	-065	-063	022	017	018	052	032	037	-068	020	510	524	514	429	523	547	11.7895	3.3547	R-114
068	137	096	116	151	-129	-140	-053	-148	-036	-107	-059	-201	-082	-017	-016	006	142	024	055	-062	064	509	536	524	489	517	561	5.1724	2.4448	R-115
098	205	080	118	193	-160	-175	-054	-217	-031	-240	-085	-125	-090	-003	012	069	201	042	083	-064	118	652	664	680	545	585	668	5.9472	2.5622	R-131
028	131	050	104	142	-146	-119	-059	-163	-014	-122	-065	-102	-069	-007	-006	026	149	-002	049	-056	068	527	544	536	481	475	555	3.4514	1.6328	R-132
146	197	063	123	195	-110	-173	001	-148	-043	-151	-060	-085	-044	023	012	035	120	066	082	-028	092	582	604	611	494	536	613	5.7838	1.9969	R-133
087	127	057	104	150	-102	-125	-014	-095	-019	-129	-062	-121	-095	005	003	012	068	022	049	-093	035	413	421	404	388	477	466	2.5933	1.2775	R-134
066	135	062	066	131	-121	-127	-036	-144	-034	-157	-074	-101	-066	019	-025	038	128	002	024	-036	050	430	447	453	394	391	454	2.4411	1.2623	R-135
097	188	089	104	179	-123	-144	-061	-189	-058	-165	-077	-103	-037	-025	-009	016	138	035	056	-028	080	517	539	548	456	457	515	1.5498	.9676	R-136
046	143	052	097	147	-136	-158	-048	-158	-017	-169	-076	-115	-095	014	005	083	204	024	067	-074	088	523	542	553	462	515	592	2.1885	1.2915	R-137
050	118	088	078	128	-122	-124	-046	-127	-053	-095	-064	-099	-048	-024	-008	028	124	-008	027	-044	056	335	351	351	326	328	367	1.7616	1.1757	R-138
089	167	087	115	206	-146	-141	-059	-182	-049	-143	-072	-099	-033	-041	-014	-017	120	010	049	-039	078	568	583	579	515	496	590	4.0739	1.8708	R-139
113	171	070	159	159	-049	-081	-019	-093	-037	-106	-009	-074	-017	-003	013	-004	068	090	079	-008	125	480	493	496	387	410	483	2.9012	.9012	R-140
136	135	062	092	158	-043	-064	-029	-093	-033	-077	-030	-057	-003	-044	002	-047	120	047	036	028	059	382	408	426	322	332	390	1.7498	.8936	R-141
045	176	096	116	183	-211	-189	-073	-249	-100	-190	-171	-132	-091	-015	008	021	157	-011	027	-014	049	559	571	554	487	461	565	6.7610	3.2220	R-142
071	151	072	073	128	-110	-127	-022	-171	-043	-069	-046	-004	-001	034	011	027	049	-014	047	391	374	448	447	391	374	448	1.5430	.9160	R-143
088	127	073	090	117	-040	-053	030	-083	-029	-082	-029	-058	-015	023	004	027	083	062	055	-019	055	392	412	398	355	333	402	1.0781	.7307	R-144
003	027	002	054	046	-025	-000	006	-019	013	025	-056	-097		020	-020	007	-072	-020	097	107	101	099	155	131				1.0533	.9167	R-145
038	048	032	038	071	-021	-011	-009	-027	-022	-028	-014	-042	-054	-021	-013	-039	040	-016	012	-030	-013	042	048	049	049	082	062	.9773	.9047	R-146
074	149	069	118	154	-098	-148	004	-111	-006	-114	-042	-135	-097	023	017	048	131	034	067	-081	069	534	549	536	480	549	561	4.1105	1.8739	R-147
122	136	051	102	139	-033	-059	-011	-109	-036	-109	-029	-074	-032	-007	010	034	047	060	056	-024	067	390	406	412	309	311	382	1.2374	.6848	R-148
029	081	063	082	099	-091	-083	-034	-075	-022	-072	-027	-094	-015	006	016	009	085	042	059	-009	075	347	375	371	353	317	378	1.4773	1.0159	R-149
045	193	088	119	177	-097	-127	-035	-212	-056	-194	-103	-114	-051	-015	002	096	185	076	089	-029	112	606	626	643	518	494	611	4.1805	1.7442	R-150
068	162	091	074	130	-065	-130	-006	-124	-040	-127	-031	-053	-023	007	011	071	159	055	083	008	084	440	450	448	380	372	450	1.2233	1.0233	R-151
085	181	076	120	186	-156	-180	-053	-176	-055	-166	-087	-129	-079	-014	006	032	150	031	061	-050	093	581	606	601	528	534	613	4.3105	1.6924	R-152
130	213	081	136	214	-136	-166	-027	-193	-040	-198	-066	-109	-062	004	012	024	142	050	083	-047	108	691	715	742	583	595	702	5.6103	2.1672	R-162
128	249	101	148	248	-205	-218	-053	-237	-048	-230	-120	-139	-086	004	003	037	203	027	077	-073	101	790	826	855	700	726	827	16.4628	5.7502	R-172
121	259	113	162	265	-246	-242	-065	-249	-053	-240	-150	-175	-122	-005	-002	024	226	016	073	-104	088	822	861	849	783	877	913	115.6884	32.1445	R-190
126	253	105	169	258	-192	-217	-055	-250	-065	-234	-114	-166	-101	-008	001	052	205	046	089	-076	116	803	829	830	707	729	837	63.3500	18.4940	R-192
127	264	118	169	270	-233	-240	-063	-256	-059	-245	-141	-176	-118	-006	-001	034	225	027	081	-097	101	838	873	866	777	848	911	179.0100	49.2820	R-100
069	106	061	070	118	-087	-087	-025	-092	-042	-086	-034	-057	-037	-033		-013	054	016	037	-011	032	353	388	372	320	288	363	4.4599	3.0606	R-211
085	151	075	102	165	-133	-133	-041	-159	-058	-170	-088	-036		-016	-004	-002	091	014	035	-025	054	521	570	558	501	409	537	11.9660	5.5503	R-212
125	195	126	157	195	-084	-123	-018	-166	-054	-150	-067	-082	-022	019	063	056	110	083	088	027	121	619	649	650	511	461	608	14.7728	6.9131	R-220
161	196	101	126	230	-100	-133	-030	-165	-097	-121	-091	-096	-005	-002	037	-001	060	057	059	035	071	545	667	712	521	374	540	9.4664	2.8623	R-231
110	133	018	098	109	004	-028	041	-054	-011	-061	014	-044	016	043	048	029	104	109	017	100	078	478	608	677	426	358	491	24.5842	4.1129	R-232
143	199	089	140	220	-133	-126	-014	-180	-071	-182	-097	-106	-022	001	030	-021	096	060	065	-016	093	708	826	846	675	541	718	17.8882	4.5477	R-233
099	151	053	112	161	-086	-093	008	-147	-055	-134	-074	-083	-006	011	040	037	080	059	067	-012	080	582	702	753	531	444	585	16.7088	3.2691	R-234
085	133	035	074	118	-064	-097	003	-126	-047	-131	-036	-058	-011	-007	020	033	078	053	052	-017	071	541	617	652	445	366	512	8.5785	2.2443	R-235
158	210	077	146	218	-097	-120	004	-171	-070	-162	-073	-084	-007	014	046	017	098	087	090	002	109	739	888	944	677	545	735	82.2300	13.3083	R-230
103	194	108	122	217	-208	-179	-068	-207	-116	-177	-116	-131	-052	-021	004	-030	146	017	044	-038	073	702	732	664	691	520	716	10.3646	5.5541	R-240
114	223	075	137	227	-199	-211	-064	-257	-078	-230	-123	-143	-087	-006	013	035	149	040	068	-074	105	939	883	804	684	655	870	28.5458	10.5022	R-250
077	155	064	124	171	-163	-155	-041	-170	-039	-199	-098	-124	-104	-023	-003	-003	121	-005	024	-089	055	637	657	578	531	589	707	7.7968	3.7145	R-260
022	094	034	097	091	-179	-132	010	-070	025	-165	-057	-140	-120	023	031	-022	146	-018	022	-126	-034	574	552	484	499	713	659	8.3043	3.4884	R-281
036	063	038	081	083	-107	-055	012	-062	004	-114	-052	-105	-054	015	041	-046	017	004	011	-050	037	431	418	362	377	392	453	11.4171	5.6283	R-282
013	068	041	070	090	-192	-113	-019	-104	-011	-209	-177	-123	-107	-015	019	063	045	-052	-023	-123	005	559	526	441	483	511	584	7.7326	2.9704	R-290
050	116	048	078	121	-139	-113	007	-099	-027	-185	-051	-105	-070	-015	017	-020	083	035	042	-070	069	777	672	591	561	523	710	8.4787	3.0628	R-311
078	172	086	111	201	-206	-149	-049	-180	-017	-173	-116	-064	-025	-024	-071		112	-032	-078	035		599	795	681	805	582	809	7.6169	3.4339	R-312
087	180	106	119	246	-254	-184	-077	-190	-107	-167	-110	-135	-072	-024	-007	-068	140	008	043	-044	053	680	808	684	919	574	787	9.7832	4.1904	R-320
091	195	107	128	250	-256	-186	-071	-205	-101	-184	-103	-140	-075	-024	-016	-077	141	003	042	-065	049	808	886	753	958	637	879	17.3993	6.9169	R-333
030	091	068	071	126	-166	-122	-054	-103	-060	-101	-074	-083	-040	-017	-017	-028	099	-011	017	-024	028	326	377	327	594	304	434	2.5777	1.7611	R-340
087	193	145	128	251	-259	-188	-072	-204	-104	-183	-102	-139	-071	-028	-021	-075	145	007	045	-057	052	784	864	736	976	632	872	19.9800	7.8342	R-340
198	202	145	161	266	-095	-079	-007	-102	-090	-076	-042	-102	006	-025	015	-108	-007	081	071	039	093	498	594	572	549	386	532	37.4873	10.1971	R-410
118	101	101	088	117	-009	-029	004	-006	-036	-004	038	-034	006	-025	039	-036	-012	054	045	043	006	176	186	174	155	118	174	12.1700	7.5252	R-420
116	104	135	122	131	-033	-053	-039	-031	-061	-041	001	019	012	-022	-043	-046	-011	029	018	070	049	077	086	084	078	035	056	38.3257	14.5694	R-430
099	078	078	091	087	-012	-034	-007	-018	-034	-087	009	-054	-022	-010	013	-022	000	058	033	-000	082	221	201	173	158	165	214	23.0308	6.9678	R-440
186	187	167	156	256	-094	-076	-041	-100	-084	-063	-045	-093	000	-033	-009	-106	-008	066	051	032	074	368	464	447	454	300	413	40.5443	9.9800	A-410
090	097	118	061	090	-027	-021	-014	000	-021	007	015	005	009	-019	006	-042	-010	006	009	037	000	023	037	026	063	014	039	15.0682	9.3826	A-420
101	087	135	110	114	-025	-034	-036	-014	-039	008	005	-004	013	-018	016	007	065	034	-017	065	-011	006	-028	-011				42.2779	15.0869	A-430
099	071	095	084	084	-005	-030	-005	-004	-016	-011	011	-040	-011	-004	009	-016	-027	049	024	010	062	127	109	085	090	113	131	24.4899	7.1511	A-440
126	132	047	079	158	-052	-048	006	-057	-059	-059	-019	-009	011	-002	017	-061	-003	066	069	031	080	465	518	500	440	338	464	39.3617	19.9617	F-410
098	086	043	079	097	012	-024	020	-010	-059	-011	044	-029	005	-002	042	-015	-018	079	063	033	080	253	256	249	181	173	235	9.2635	9.5842	F-420
112	109	087	105	127	-040	-074	-031	-059	-089	-059	006	-046	008	-023	005	-039	-007	050	039	058	066	265	277	276	214	166	249	26.4450	20.0551	F-430
087	078	061	087	076	-031	-035	-006	-028	-039	-095	005	-006	-024	-013	015	-021	006	062	041	-003	092	271	255	228	197	197	259	21.4307	7.7983	F-440
135	148	153	134	150	-013	-028	-040	-059	-044	-032	-011	-048	-033	-015	016	-016	-108	001	-004	004	-006	-041	-020	-007	-015	006	-017	32.9775	22.3048	A-500
403	451	370	403	396	043	-055	-070	-094	-168	-041	-014	-131	013	-140	-029	-022	-060	091	014	079	104	082	108	125	069	043	077	7.0099	2.9231	R-601
526	624	402	302	607	-064	-148	-094	-215	-214	-147	-133	-091	-031	-101	-010	-014	031	054	025	167	137	189	195	214	224	167	137	4.9478	3.3220	R-602
075	250	259	127	162	-070	-072	-072	-147	024	-104	-051	-106	-085	-062	-051	041	-034	-032	-046	-003		104	105	111	102	121	120	1.9316	1.6459	R-603
400	449	396	327	481	-106	-178	-078	-151	-147	-104	-103	-234	-135	-088	-043	-033	015	-000	-068	042		152	171	178	136	147	167	3.6200	2.1271	R-604
526	573	391	412	603	-104	-148	-090	-166	-176	-115	-112	-108	-083	-013	-069	016	033	021	011	077		176	199	195	182	155	191	4.1123	2.5141	R-605
	589	327	327	615	001	-071	-040	-088	-147	-052	-060	-016	052	-063	-033	-066	-043	112	053	091	102	103	136	154	094	067	101	5.9115	2.1106	R-606
327	424		346	475	-115	-189	-188	-237	-198	-186	-155	-138	-065	-115	-077	-075	044	-037	-055	011	009	082	102	099	122	059	096	1.2873	1.3486	R-607
253	327	346		382	-075	-129	-101	-156	-113	-094	-099	-114	-043	-080	-004	-013	050	037	039	029	105	134	158	161	138	129	150	4.9749	2.4958	R-609
615	625	475		382	-179	-222	-150	-247	-231	-130	-159	-110	-042	-126	-027	-119	013	005	009	004		224	264	251	264	196	252	5.0125	5.1287	R-610
-011	-115	-165	-075	-179	712			485		579	383	466	418	449	423	477	038	622	489	404	334	-214	-218	-160	-289	-250	-270	61.0637	11.3945	F-701
-071	-200	-189	-129	-222		712		388		491	429	374	350	399	349	298	222	221		-090	409	308	290	179	-199	-220	-218	-216	-219	-231	26.9052	7.5677	F-702
-040	-118	-188	-101	-150	485	388		585		412	405	333	411	300	482	383	139	442	484	275	280	-038	-045	-031	-086	-030	-055	41.8342	11.7085	F-703
-088	-248	-237	-156	-247	579	491	585			536	663	599	509	378	604	491	361	133	440	520	363	303	-231	-239	-228	-221	-180	-237	49.0674	13.2911	F-704
-147	-211	-198	-113	-231	383	429	412	536			341	364	354	195	508	380	387	283	306	011	244	301	-074	-091	-067	-110	002	-068	32.1395	8.2432	F-705
-052	-208	-136	-094	-130	466	374	405	663	341			534	425	363	445	369	234	080	377	460	358	239	-236	-225	-217	-197	-219	-246	20.9990	6.6071	F-706
-060	-205	-155	-099	-159	418	350	333	599	364	534			353	298	356	254	225	072	512	339	287	205	-108	-118	-109	-127	-132	-127	16.1732	5.4515	F-707
-016	-109	-138	-118	-110	491	399	411	509	354	534	353			565	433	318	277	127	480	449	493	332	-147	-148	-131	-154	-167	-171	25.4009	7.1192	F-708
-052	-106	-065	-043	-042	423	349	300	378	195	353	298	565			322	286	205	078	481	416	644	353	-089	-070	-094	-081	-157	-120	10.6824	3.2381	F-709
-063	-096	-175	-080	-126	431	298	630	604	508	445	336	433	322			692	572	516	659	345	450	-006	-008	006	-031	014	-010	47.5346	9.9003	F-710
-003	-011	-077	-004	-011	337	222	482	491	380	387	348	385	205	519			391	611	336	474	098	391	006	010	032	-020	-002	-004	21.9415	4.9937	F-711
-066	-024	-075	-013	-119	477	221	383	361	387	234	225	277	206	572	519			602	453	490	250	389	-003	-010	020	-068	-004	-023	35.0373	7.2531	F-712
-043	-175	044	050	013	-038	-090	139	133	289	080	157	171	169	175	182		278		807	555	675	155	162	171	169	175	182	20.9324	5.8174	F-713
112	055	-037	037	012	622	409	442	440	306	377	321	480	481	516	512	453		278		807	555	675	033	044	069	-003	-027	006	64.0972	8.8919	F-714
053	-027	-055	029	005	489	308	360	334	299	443	460	512	416	510	490	419	407	520			489	061	074	094	045	041	055	70.4560	9.7961	F-715
091	014	-011	029	-009	404	290	275	363	244	358	287	493	644	345	336	250	136	555	520		489		-085	-057	-034	-061	-147	-107	25.4106	6.2213	F-716
102	113	009	105	224	334	179	280	303	301	239	205	332	353	450	474	389	376	675	680	489			092	090	121	058	044	076	41.4644	5.8474	F-717
103	213	082	134	224	-214	-199	-038	-231	-074	-236	-108	-147	-089	-006	006	-003	155	033	061	-085	092	936	834	786	699	699	943	158.4986	52.4371	C-001
136	238	102	158	264	-218	-202	-045	-239	-074	-225	-118	-148	-070	-008	014	-010	162	064	-057	099		936	944	879	715	948		482.8919	114.0962	C-002
154	250	099	161	251	-160	-181	-031	-228	-067	-217	-109	-131	-049	006	032	040	171	069	094	-034	121	834	944	757	674	848		109.4386	20.8261	C-003
094	205	122	138	264	-289	-216	-086	-221	-110	-167	-127	-154	-081	-031	-020	-068	169	-027	041	-061	055	786	879	757	658	889	855	86.0886	15.6702	C-004
067	188	059	129	196	-258	-219	-030	-180	002	-219	-127	-167	-157	-014	-004	-023	176	-027	042	-081	044	699	715	674	658	855		35.5390	11.5775	C-005
101	225	096	150	252	-270	-231	-055	-237	-074	-246	-132	-171	-120	-014	-004	-023	182	006	055	-107	076	943	948	848	889	855		375.1927	118.2173	C-006

Table V-3 (continued)

Table V-3b. All 15-year-old girls not in high school (N=163)

Diagonal column headers (left to right): 1 Grade, 2 Sex, 3 Screening, 4 Vocab I, 5 Literature, 6 Music, 7 Soc.Stud., 8 Math, 9 Phys.Sci, 10 Bio.Sci, 11 Sci Attitude, 12 Aero & Space, 13 Elec & Electron, 14 Mechanical, 15 Farming, 16 Home Ec, 17 Sports, 18 Art, 19 Law, 20 Health, 21 Engineering, 22 Architecture, 23 Journalism, 24 Foreign Travel, 25 Military.

Var	Var	Code	Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	1		Grade			135	071	021	121	215	255	173	075	165	048	246	137	141	131	136	076	168	084	-032	056	035	199	057
	2		Sex (1=M, 2=F)																									
1	3	R-101	Info I: Screening	135			491	387	347	512	381	479	485	422	099	326	444	526	586	288	414	283	470	165	288	201	129	111
2	4	R-102	" Vocab I	071		491		395	362	478	286	490	389	408	098	382	453	482	463	286	389	351	445	250	211	196	216	057
3	5	R-103	" Literature	021		387	395		347	579	370	412	359	440	240	358	437	413	373	273	460	304	383	184	304	188	152	-007
4	6	R-104	" Music	121		347	362	347		464	471	451	476	500	091	370	484	519	505	432	435	406	433	372	283	186	203	-018
5	7	R-105	" Soc.Studies	215		512	478	579	464		471	451	476	500	091	370	484	519	505	432	435	406	433	372	283	186	203	-018
6	8	R-106	" Math	255		381	286	370	260	471		391	178	306	152	341	385	326	264	238	263	211	314	230	279	055	-003	-083
7	9	R-107	" Phys. Sci	173		479	490	412	363	451	391		328	377	094	338	416	452	477	280	309	326	377	211	238	113	205	069
8	10	R-108	" Bio. Sci	075		485	389	399	266	476	178	328		367	082	237	397	376	374	236	365	211	251	139	240	156	135	034
9	11	R-109	" Sci Attitude	105		422	408	440	192	500	306	377	367		067	255	498	525	413	300	427	280	439	163	314	201	290	062
10	12	R-110	" Aero & Space	048		099	098	240	055	091	152	094	082	067		197	-018	073	-017	001	078	098	121	018	126	025	088	096
11	13	R-111	" Elec & Electron	246		326	382	358	366	370	341	338	227	255	197		317	372	268	155	264	302	305	263	181	217	153	021
12	14	R-112	" Mechanical	137		444	453	437	337	484	385	416	397	498	-018	317		497	457	274	430	352	339	257	385	144	236	025
13	15	R-113	" Farming	141		526	462	413	188	519	326	452	376	525	078	372	497		544	292	421	365	421	140	276	167	194	056
14	16	R-114	" Home Ec	131		586	463	373	307	505	264	477	374	413	-017	268	457	544		187	469	316	443	242	198	142	255	038
15	17	R-115	" Sports	136		288	286	273	341	432	238	280	236	300	001	155	274	292	187		187	147	175	158	193	106	180	029
	18	R-131	Info II: Art	076		414	389	460	308	435	263	309	365	427	078	264	430	421	469	187		288	452	302	295	270	256	-003
	19	R-132	" Law	168		283	351	300	212	406	211	326	211	280	098	302	352	365	316	147	288		359	169	193	234	162	-013
	20	R-133	" Health	084		470	445	383	299	433	314	377	251	439	121	305	339	421	443	175	452	359		278	194	226	154	-080
	21	R-134	" Engineering	-032		165	250	184	294	372	230	211	139	163	018	263	257	140	242	158	302	169	278		033	146	098	-001
	22	R-135	" Architecture	056		288	211	304	023	283	279	238	240	314	126	181	385	276	198	193	295	193	194	033		171	178	045
	23	R-136	" Journalism	035		201	196	188	104	186	055	113	156	201	025	217	144	167	142	106	270	234	226	146	191		091	-080
	24	R-137	" Foreign Travel	199		129	216	152	179	203	-003	205	135	290	088	153	236	194	255	180	256	162	154	098	178	091		073
	25	R-138	" Military	057		111	057	-007	058	-018	-083	069	034	062	096	021	025	056	038	029	-003	-013	-080	-061	045	-080	073	
	26	R-139	" Acct,Bus,Sales	036		306	321	208	183	265	167	179	211	288	247	288	228	237	217	242	164	264	292	225	084	281	095	-053
	27	R-140	" Pract.Knowl.	016		442	384	354	168	370	200	279	253	474	094	223	301	346	453	146	414	250	505	169	288	210	223	017
	28	R-141	" Clerical	-015		278	319	198	076	205	167	326	121	212	094	233	192	241	265	184	164	174	284	049	053	207	127	150
	29	R-142	" Bible	-047		364	432	367	157	358	244	306	324	373	136	220	278	413	287	175	344	263	275	086	303	097	045	085
	30	R-143	" Colors	021		160	166	156	153	144	087	103	184	141	154	124	137	008	141	-000	071	166	203	090	028	055	-022	-015
	31	R-144	" Etiquette	141		281	279	214	214	289	345	230	114	360	-021	279	312	315	279	219	312	260	424	178	169	196	204	-056
	32	R-145	" Hunting	183		111	116	057	071	137	181	030	183	140	-005	188	132	275	053	-023	046	060	052	011	065	047	019	246
	33	R-146	" Fishing	-004		123	051	122	014	003	185	162	118	028	037	216	084	116	058	049	097	050	014	008	011	074	-050	025
	34	R-147	" Outdr Act(Other)	113		392	267	362	227	377	286	329	262	438	079	332	418	432	385	233	403	175	353	160	245	137	191	037
	35	R-148	" Photography	061		241	245	212	220	364	214	122	173	333	001	240	315	307	324	187	289	275	334	133	136	171	204	-008
	36	R-149	" Games	064		344	276	259	191	321	205	288	287	310	-021	174	299	314	384	247	346	181	355	204	095	054	081	-004
	37	R-150	" Theater,ballet	096		250	324	279	221	339	163	274	241	376	118	168	400	266	318	123	346	354	336	242	192	170	286	073
	38	R-151	" Foods	035		107	122	102	275	236	056	083	056	054	-034	195	102	086	271	095	120	126	168	019	-052	085	-005	057
	39	R-152	" Miscellaneous	096		263	328	280	252	290	220	247	177	287	010	211	312	258	286	255	321	159	225	300	243	269	103	
	40	R-162	" Vocabulary II	091		381	316	310	157	371	218	248	235	339	160	197	334	362	386	195	421	368	496	285	248	395	188	-006
	41	R-172	Vocab Tot. (I & II)	097		545	880	440	340	531	316	478	398	464	151	374	494	529	528	304	492	437	569	323	276	339	249	038
16	42	R-190	Info I Total	211		735	704	694	550	807	564	679	587	642	187	552	695	715	698	474	568	454	565	339	376	237	278	052
	43	R-192	Info II Total	129		605	604	550	391	626	404	505	452	628	185	479	582	601	601	326	692	553	695	388	429	377	350	114
	44	R-100	Info Total (I & II)	191		721	700	674	518	778	532	648	565	666	195	551	686	706	695	442	638	510	677	372	412	298	316	076
17	45	R-211	Memory for Sentences	040		298	295	191	145	230	271	275	324	171	108	070	201	240	341	002	196	146	193	066	153	-018	084	044
18	46	R-212	Memory for Words	150		359	348	200	155	282	254	350	266	151	081	082	203	207	296	186	137	138	307	038	103	003	034	023
19	47	R-220	Disguised Words	101		384	479	362	312	417	286	325	332	337	094	303	393	386	434	188	413	218	303	155	226	131	219	017
20	48	R-231	English:Spelling	062		373	279	230	201	340	363	343	238	191	090	158	289	278	302	200	324	117	330	376	114	163	073	-004
21	49	R-232	" Capitalization	022		414	371	304	206	389	306	451	310	331	067	270	380	420	426	142	370	272	382	179	299	163	166	-000
22	50	R-233	" Punctuation	174		379	406	298	205	371	373	447	308	306	143	254	297	310	412	198	363	093	350	293	225	189	136	096
23	51	R-234	" Usage	079		452	445	354	194	424	271	351	331	345	-020	136	414	427	447	232	432	229	369	131	263	276	105	075
24	52	R-235	" Eff. Exp.	053		323	250	227	161	340	204	199	213	241	069	148	250	291	260	223	169	094	066	187	049	031	-081	
25	53	R-230	" Total	093		513	469	377	255	489	374	498	376	384	091	274	440	469	502	242	449	238	461	267	307	224	154	028
26	54	R-240	Word Functions	192		119	145	287	141	178	292	280	153	114	080	299	126	089	057	188	105	186	048	033	099	045	022	058
27	55	R-250	Reading Comprehension	054		418	578	448	358	550	200	457	406	428	090	317	420	459	505	256	520	363	435	285	275	245	213	-007
28	56	R-260	Creativity	149		095	138	106	059	214	110	251	196	221	049	182	204	305	196	106	212	-043	099	044	050	237	-071	
29	57	R-270	Mechanical Reasoning	124		119	177	225	119	186	026	139	105	201	092	258	180	225	174	147	155	132	169	140	023	112	272	-117
30	58	R-281	Vis. in 2 Dimens	215		261	226	205	134	248	059	037	139	174	022	257	171	246	211	126	204	020	142	014	122	017	300	-032
31	59	R-282	Vis. in 3 Dimens	037		151	115	090	175	191	018	125	211	053	067	161	147	149	232	056	206	070	076	179	-029	-060	123	-046
32	60	R-290	Abstract Reasoning	067		127	167	122	-017	071	-021	177	160	167	-000	112	135	112	246	039	121	013	051	169	072	006	237	004
33	61	R-311	Math I	133		245	209	208	147	259	196	227	208	266	140	228	184	247	165	214	167	047	159	219	150	206	149	
34	62	R-312	Math II	127		352	318	213	178	309	238	329	257	253	-009	165	226	358	306	206	205	187	279	103	267	097	204	-030
35	63	R-320	Math I & II	162		379	335	263	205	358	274	353	293	324	075	243	259	384	356	263	235	153	174	307	152	256	066	
36	64	R-333	Math III	041		-111	-118	-025	036	-017	-021	-064	-095	-064	025	013	013	-010	-017	-041	022	004	-037	-041	022	024	-004	-064
37	65	R-340	Math Total(I+II+III)	158		294	262	223	194	309	234	288	224	275	078	234	335	307	217	215	137	179	131	278	143	204	035	
42	66	R-410	Arith Computation	109		557	338	371	135	437	362	414	327	409	030	370	394	431	385	234	304	279	409	135	333	161	157	-024
43	67	R-420	Table Reading	084		210	161	115	011	103	097	105	089	083	-076	114	229	173	194	099	106	155	-024	226	052	078	087	
44	68	R-430	Clerical Checking	134		261	099	118	047	117	114	109	028	-002	-050	097	055	079	162	117	073	183	164	047	098	116	016	140
45	69	R-440	Object Inspection	092		296	110	220	010	104	056	087	156	138	061	074	172	134	237	077	134	218	071	-115	218	071	094	048
46	70	A-410	Arith Computation	143		306	148	219	097	153	271	291	192	167	012	374	166	207	185	164	078	095	120	062	152	089	065	105
47	71	A-420	Table Reading	162		066	072	001	005	-008	-006	041	-030	131	-030	236	049	058	-016	103	-026	054	-083	-081	005	048	060	104
48	72	A-430	Clerical Checking	150		193	028	068	061	053	074	077	-017	-042	-045	162	011	035	068	120	011	121	078	009	090	098	007	162
49	73	A-440	Object Inspection	137		210	069	175	035	049	067	066	100	009	188	089	137	126	102	083	099	010	-122	162	031	059	099	
38	74	F-410	Arith Computation	-049		254	200	151	034	303	080	113	134	255	020	-035	241	233	207	065	246	197	311	076	189	073	097	-152
39	75	F-420	Table Reading	-086		159	098	125	-047	122	113	070	131	069	-051	-133	198	126	231	-004	145	111	208	063	243	004	070	-018
40	76	F-430	Clerical Checking	014		239	187	151	-011	181	126	106	106	003	-030	-103	112	122	258	036	161	198	244	100	053	081	074	005
41	77	F-440	Object Inspection	024		254	101	175	000	108	028	071	142	178	079	-040	173	167	236	031	133	233	109	-068	182	075	162	-009
50	78	A-500	Preferences	025		363	215	187	193	220	132	239	217	018	221	334	274	215	183	275	163	184	060	327	049	041	152	
51	79	R-601	SAI: Sociability	066		417	292	288	195	238	229	255	124	250	105	287	213	205	369	270	181	209	249	116	147	002	139	028
52	80	R-602	" Soc.Sensitivity	046		430	296	254	302	297	214	325	276	288	090	298	243	356	427	237	289	153	217	027	011	205	027	
53	81	R-603	" Impulsiveness	054		183	039	160	094	103	232	166	-078	056	126	214	032	023	124	160	020	-034	035	043	-023	087	-029	037
54	82	R-604	" Vigor	027		370	232	236	226	283	208	266	195	235	070	261	230	342	347	303	309	176	324	259	-000	147	162	-020
55	83	R-605	" Calmness	005		393	310	269	341	303	201	247	220	213	175	235	247	309	372	278	344	211	336	288	193	090	197	071
56	84	R-606	" Tidiness	015		527	305	330	348	361	201	311	276	203	168	242	246	300	392	286	320	159	294	185	159	103	148	034
57	85	R-607	" Culture	103		462	305	317	257	307	246	285	226	241	178	279	177	314	389	270	269	129	303	289	058	012	128	-037
58	86	R-608	" Leadership	-128		-021	010	-004	108	-022	-010	053	-071	-068	091	148	-007	030	039	081	050	-057	-031	046	-046	017	077	046
59	87	R-609	" Self-Confidence	005		348	303	197	237	240	247	187	194	149	-052	179	274	176	287	213	252	137	211	089	204	010	065	060
60	88	R-610	" Mature Personality	030		313	136	251	264	268	207	207	264	066	139	177	116	222	270	226	218	101	207	193	035	032	103	083
	89	R-701	Int Inv: Phys Sci	-018		232	113	064	045	043	-090	207	117	204	036	197	032	048	189	056	174	-001	214	006	-047	023	121	-076
	90	R-702	" Biol Sci & Med	028		156	067	068	004	058	-055	-051	101	165	097	198	-001	004	114	060	122	-066	085	009	-004	-045	143	-018
	91	R-703	" Pub.Serv.	044		155	020	036	020	017	-030	-051	101	089	116	083	113	030	098	104	025	156	-055	227	-033	-059	005	-061
	92	R-704	" Lit-Lang.	087		-022	-106	-032	-002	-036	-058	-045	022	062	048	104	-046	-071	033	-014	119	-066	065	-000	-139	-041	024	-066
	93	R-705	" Soc.Serv.	054		-060	-011	-014	-015	-109	-117	-041	-065	075	071	032	-020	-010	065	-028	019	-059	000	-085	-005	-072	122	096
	94	R-706	" Artistic	035		-082	-101	-041	-059	-103	-084	-032	-042	-030	118	117	-140	-139	-037	-085	037	058	027	-034	-087	-141	-060	-117
	95	R-707	" Musical	-000		022	-098	044	020	072	-064	-036	064	049	099	059	-026	083	-018	112	030	091	-041	029	086	014	042	
	96	R-708	" Sports	190		-027	-158	-080	016	-128	-089	-006	-101	-024	-002	076	-026	-168	-047	-122	036	-024	-029	-020	-107	-148	077	033
	97	R-709	" Outdr Rec.	083		-125	-006	007	010	123	-015	-037	-042	-011	-004	137	017	064	102	164	003	147	088	-041	-061	-006	019	
	98	R-710	" Bus.-Mgnt.	138		090	-010	066	094	094	-032	-062	062	100	059	063	104	-033	006	159	010	176	011	167	031	-104	-064	091	-066
	99	R-711	" Sales	042		144	023	043	067	045	-020	083	089	133	089	146	042	011	170	064	140	-079	162	-055	-053	-074	100	042
	100	R-712	" Computation	130		226	168	176	120	129	-132	042	126	174	026	158	085	141	237	131	179	035	212	006	-040	027	118	-052
	101	R-713	" Office Work	122		081	090	134	138	101	057	092	137	060	162	059	053	083	050	158	022	122	079	-009	-036	153	-063	
	102	R-714	" Mech-Tech	087		282	149	125	091	153	-003	092	184	197	087	209	061	064	264	092	210	089	276	069	060	031	147	-081
	103	R-715	" Skilled Trades	063		128	098	030	064	096	-024	131	138	038	151	066	048	203	077	195	079	212	069	007	-040	131	-055	
	104	R-716	" Farming	037		261	062	053	055	133	068	097	125	140	075	184	012	061	144	045	261	056	228	103	074	011	029	-055
	105	R-717	" Labor	105		301	024	151	132	225	064	159	178	192	022	295	156	183	318	124	276	173	050	-017	060	-063		
	106	C-001	Composite: I.Q.Comp.	101		402	515	409	276	472	222	443	373	439	100	323	389	424	485	249	509	263	327	305	276	210	302	040
	107	C-002	" Gen.Acad.Apt.	136		556	576	451	321	578	421	561	449	513	137	351	490	510	573	304	509	298	486	316	346	263	246	029
	108	C-003	" Verbal	097		577	608	533	322	583	417	556	440	465	137	346	515	543	563	294	526	326	540	316	346	275	195	029
	109	C-004	" Quantitative	201		354	294	284	237	388	447	353	240	302	093	271	302	381	350	246	256	181	247	161	317	137	178	-004
	110	C-005	" Technical	234		552	502	579	385	589	419	688	572	516	299	663	703	582	512	326	461	410	447	306	338	221	321	020
**	111	C-006	" Sci. Apt.	212		516	569	512	373	589	405	600	489	522	193	505	565	571	555	326	492	330	411	335	377	232	354	018

Table V-3b (continued)

Acct,Bus,Sales	Pract.Knowl.	Clerical	Bible	Colors	Etiquette	Hunting	Fishing	Outdr.Act(Other)	Photography	Games	Theater,Ballet	Foods	Miscellaneous	Vocabulary II	Voc.Tot. (I & II)	Info I Total	Info II Total	Info Tot (I & II)	Mem.for Sentences	Mem.for Words	Disguised Words	Spelling	Capitalization	Punctuation	Usage	Eff. Exp.	Eng. Total	Word Functions	Reading Comp.	Creativity	Mech.Reasoning	Code
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	
036	016	-015	-047	021	141	183	-004	113	061	064	096	035	096	091	097	211	129	191	040	150	101	062	022	174	079	053	093	192	054	149	124	
306	442	278	364	160	281	111	123	392	241	344	250	107	263	381	545	735	605	721	298	359	384	373	414	379	452	323	513	119	418	095	119	R-101
321	384	319	437	166	279	116	051	267	245	276	324	122	328	316	880	704	604	700	295	346	479	279	371	406	445	250	469	195	578	138	177	R-102
208	354	198	367	156	214	057	122	362	212	259	279	102	280	310	440	694	550	674	191	200	362	230	304	298	354	227	377	287	448	106	225	R-103
183	168	076	157	153	214	071	014	227	220	191	221	275	252	157	340	550	391	518	145	155	312	201	206	205	194	161	255	191	358	059	119	R-104
265	370	205	358	144	289	137	003	377	364	321	339	236	290	371	531	807	626	778	230	282	417	340	389	371	424	340	489	178	550	214	186	R-105
167	200	167	244	087	345	181	185	286	214	205	163	056	220	218	316	564	404	532	221	254	286	303	306	373	211	204	374	292	260	110	026	R-106
179	279	326	306	103	230	030	162	329	122	288	274	083	247	248	478	679	505	648	275	350	325	343	451	447	351	199	498	280	457	251	199	R-107
211	253	121	324	184	114	183	118	262	173	287	241	056	177	235	398	587	452	565	324	266	332	238	310	308	331	213	376	153	406	196	105	R-108
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197	209	101	206	054	305	267	034	286	202	172	239	092	238	264	344	486	407	480	197	268	313	356	348	381	364	286	453	167	381	358	212	C-004
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304	407	227	346	162	323	221	079	444	385	293	431	063	392	442	632	781	676	778	369	356	528	505	531	547	471	414	653	307	780	487	451	C-006

Var*	Var	Code	Description	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
	1		Grade	215	037	067	133	127	162	041	158	109	084	134	092	143	162	150	137	-049	-086	014	024	025	066	046	054	027	005
	2		Sex (1=M, 2=F)																										
1	3	R-101	Info I: Screening	261	151	127	245	352	379	-111	294	557	210	261	296	306	066	193	210	254	159	239	254	363	417	430	183	370	393
2	4	R-102	" Vocab I	226	115	167	209	318	335	-118	252	338	161	099	110	148	072	028	069	200	098	187	101	215	292	296	039	232	310
3	5	R-103	" Literature	205	090	122	208	213	263	-025	223	371	115	118	220	219	001	068	175	151	125	151	175	187	288	254	160	236	269
4	6	R-104	" Music	134	175	-017	147	178	205	036	194	135	011	047	019	097	055	061	035	034	-047	-011	000	193	195	302	094	226	341
5	7	R-105	" Soc.Studies	248	191	071	259	309	358	-017	309	437	103	117	104	153	-008	053	049	303	122	181	108	220	238	297	103	289	303
6	8	R-106	" Math	059	018	-021	196	238	274	-021	234	362	097	114	056	271	-006	074	067	080	113	126	028	132	229	214	232	208	201
7	9	R-107	" Phys. Sci	037	125	177	227	329	353	-064	288	414	105	109	087	291	041	077	066	113	070	106	071	218	255	325	166	266	247
8	10	R-108	" Bio. Sci	139	211	100	208	257	293	-095	224	327	089	028	156	192	-030	-017	100	134	131	106	142	239	124	270	-078	195	220
9	11	R-109	" Sci Attitude	174	053	187	266	253	324	-064	262	409	083	-002	138	167	021	-042	020	255	069	083	178	217	250	268	056	235	213
10	12	R-110	" Aero & Space	022	067	-000	140	-009	075	025	075	030	-076	-050	061	012	-030	-045	009	020	-051	-030	079	018	105	090	126	070	175
11	13	R-111	" Elec & Electron	257	161	112	228	165	243	013	218	370	114	097	074	374	236	162	188	-035	-133	-103	-040	221	287	298	214	261	235
12	14	R-112	" Mechanical	171	147	135	184	226	259	015	234	394	229	055	172	166	049	011	089	241	198	112	173	334	213	243	032	230	247
13	15	R-113	" Farming	246	145	112	247	358	384	-010	335	431	173	079	194	207	058	039	137	233	126	122	167	274	285	356	093	342	309
14	16	R-114	" Home Ec	211	232	246	165	386	356	-017	307	385	194	162	237	185	-016	068	126	207	231	258	236	215	369	427	124	347	372
15	17	R-115	" Sports	126	056	039	214	206	263	-041	217	234	099	117	077	164	103	120	102	065	-004	036	031	183	270	237	160	303	278
	18	R-131	Info II:Art	204	206	121	167	205	235	022	215	304	106	073	139	078	-026	011	083	246	145	161	133	275	181	289	020	309	344
	19	R-132	" Law	020	070	013	047	187	153	004	137	279	155	183	220	095	054	121	099	197	111	198	233	163	209	153	-034	176	211
20	R-133	" Health	142	076	051	051	279	218	-037	179	409	106	164	083	120	-083	078	010	311	208	244	109	184	249	332	035	324	330		
21	R-134	" Engineering	014	179	169	159	103	161	-041	127	135	-024	047	-115	062	-081	009	-122	076	063	100	-068	060	116	217	043	259	288		
22	R-135	" Architecture	122	-029	072	219	267	307	022	278	333	226	098	218	152	005	090	162	189	243	053	182	327	147	027	-023	-003	193		
23	R-136	" Journalism	017	-040	006	150	097	152	024	143	161	052	116	071	089	048	098	031	073	004	081	075	094	092	011	087	147	090		
24	R-137	" Foreign Travel	300	123	237	206	204	256	-004	224	157	070	036	094	065	060	007	-039	097	020	074	162	041	139	205	-029	162	197		
25	R-138	" Military	-032	-046	004	149	-030	066	-064	035	-024	087	140	048	105	104	162	099	-152	-018	005	-009	152	028	027	039	-020	071		
26	R-139	" Acct,Bus,Sales	189	-034	035	154	139	182	045	177	296	092	141	087	243	140	089	113	039	-053	161	035	142	285	212	167	300	263		
27	R-140	" Pract.Knowl.	217	107	268	104	277	247	-119	175	377	239	103	182	206	-025	012	060	174	290	232	209	252	270	199	-039	215	233		
28	R-141	" Clerical	033	-089	115	069	118	120	-097	070	265	228	098	206	210	179	095	169	044	054	040	160	283	147	271	233	208	168		
29	R-142	" Bible	076	010	-004	070	243	205	-065	157	286	156	070	155	159	-019	-007	120	129	192	190	125	376	258	253	067	250	287		
30	R-143	" Colors	101	225	140	-032	080	036	-008	029	226	077	027	129	020	-149	-058	-037	228	078	190	204	040	094	046	-183	076	022		
31	R-144	" Etiquette	093	003	073	202	247	283	-003	248	314	232	160	111	199	207	137	072	112	028	108	101	169	298	225	141	138	277		
32	R-145	" Hunting	130	017	003	148	166	184	224	243	179	139	025	041	263	314	093	198	-147	-192	-137	-094	156	029	096	127	-042	058		
33	R-146	" Fishing	009	036	021	-057	030	-013	-018	-018	170	087	205	030	313	173	192	197	-184	-094	101	-109	098	202	238	206	132	175		
34	R-147	" Outdr Act(Other)	096	082	145	134	235	235	076	235	314	075	043	085	142	050	039	061	180	028	024	072	216	182	286	131	230	223		
35	R-148	" Photography	136	156	154	218	167	238	-086	179	277	267	057	176	107	125	033	125	181	157	071	151	203	251	173	076	111	221		
36	R-149	" Games	091	083	076	048	181	150	-010	129	387	144	073	079	218	-064	-014	030	171	220	212	087	332	214	251	007	230	256		
37	R-150	" Theater,ballet	117	073	049	214	249	292	-082	227	287	254	213	290	097	044	123	158	203	231	270	286	329	277	124	076	152	223		
38	R-151	" Foods	066	-027	-159	019	125	096	-000	081	087	088	123	-029	071	126	083	043	-078	-041	131	-073	146	195	177	157	232	131		
39	R-152	" Miscellaneous	221	206	186	209	201	256	-038	212	287	085	070	087	151	-016	040	022	140	111	090	105	082	212	250	084	286	343		
40	R-162	" Vocabulary II	118	090	143	261	238	311	-080	245	364	266	263	241	116	040	143	116	266	248	351	250	182	277	244	149	283	348		
16	41	R-172	Vocab Tot. (I & II)	222	128	192	281	348	397	-125	305	426	249	203	200	165	072	092	108	278	195	311	198	246	349	336	103	309	398
	42	R-190	Info I Total	278	211	173	327	413	467	-053	393	563	194	156	219	310	061	094	156	256	146	187	189	346	410	462	177	408	438
	43	R-192	Info II Total	222	125	157	243	382	398	-024	342	544	265	222	242	294	082	128	162	255	202	281	216	431	405	414	122	403	468
	44	R-100	Info Total (I & II)	271	190	175	312	421	464	-045	392	582	228	187	237	318	071	111	165	267	173	229	207	392	427	466	165	425	469
17	45	R-211	Memory for Sentences	104	-003	147	239	168	251	-144	169	312	079	-000	259	044	-189	-125	022	295	293	266	346	061	020	168	-186	065	072
18	46	R-212	Memory for Words	083	059	103	266	227	307	-080	241	381	080	193	209	164	-077	116	049	229	172	235	256	143	156	182	067	113	167
19	47	R-220	Disguised Words	273	159	259	252	262	322	-021	276	310	142	297	205	164	120	238	162	149	025	233	164	216	324	317	128	213	382
20	48	R-231	English:Spelling	017	138	270	377	249	386	-023	332	360	054	061	071	175	-151	-032	-053	192	225	218	141	092	154	223	039	214	244
21	49	R-232	" Capitalization	266	216	221	233	358	377	-077	304	560	229	132	227	244	-110	048	053	331	372	225	279	295	269	280	015	241	254
22	50	R-233	" Punctuation	242	172	250	362	289	404	-050	337	464	032	123	088	250	-132	031	-009	218	180	241	130	102	251	287	058	153	288
23	51	R-234	" Usage	137	-002	128	281	363	407	-026	349	415	171	166	173	078	002	080	067	369	187	242	192	229	217	304	106	187	285
24	52	R-235	" Eff. Exp.	177	109	211	256	208	288	044	270	389	-031	121	140	090	-180	030	-023	325	163	237	214	-013	130	084	-090	044	049
25	53	R-200	" Total	248	186	279	375	402	488	-051	411	602	158	161	203	241	-141	048	024	381	320	300	266	229	288	327	038	239	309
26	54	R-240	Word Functions	023	093	131	184	106	178	-099	121	279	081	099	135	208	138	092	210	062	-062	052	029	001	-001	124	048	-004	120
27	55	R-250	Reading Comprehension	210	255	235	351	373	454	-101	364	452	162	087	231	206	-029	-011	108	256	210	241	241	147	165	293	013	188	280
28	56	R-260	Creativity	172	246	153	282	310	372	-109	307	248	051	-088	016	084	-044	-128	-044	176	104	054	086	002	077	044	-053	088	075
29	57	R-270	Mechanical Reasoning	198	202	200	130	210	217	087	292	211	003	-058	134	104	-019	-083	078	111	023	011	128	043	248	105	-014	165	023
30	58	R-281	Vis. in 2 Dimens		247	118	160	252	263	-074	205	318	135	155	313	124	-023	078	177	206	174	220	303	164	218	131	-035	102	097
31	59	R-282	Vis. in 3 Dimens	247		252	133	066	121	-100	191	123	097	047	191	-014	-098	-004	044	154	114	155	234	018	-011	123	-104	009	011
32	60	R-290	Abstract Reasoning	118	252		185	086	165	011	149	281	173	-018	081	168	-010	-020	-020	111	201	-001	128	-049	064	066	-018	081	025
33	61	R-311	Math I	160	133	185		272	760	043	685	346	194	-006	110	252	125	-001	042	084	076	-013	122	071	187	086	165	-021	161
34	62	R-312	Math II	252	066	086	272		832	180	798	403	207	112	166	221	041	026	119	185	182	225	142	193	195	218	049	238	291
35	63	R-320	Math I & II	263	121	165	760	832		146	934	471	251	072	176	294	100	017	105	173	166	144	166	171	240	197	128	135	291
36	64	R-333	Math III	-074	-100	011	043	180	146		431	-053	-122	-097	-135	048	082	-058	-033	-117	-225	-118	-164	-074	-117	-147	-032	-020	-172
37	65	R-340	Math Total(I+II+III)	205	071	149	685	798	934	491		396	177	029	106	277	118	-006	080	110	165	084	087	124	169	120	102	112	194
42	66	R-410	Arith Computation	318	123	281	346	403	471	-053	396		310	236	328	626	076	140	229	365	257	290	285	333	350	242	076	234	300
43	67	R-420	Table Reading	135	097	173	194	207	251	-122	177	310		378	479	116	585	322	452	206	450	297	326	349	184	006	007	026	184
44	68	R-430	Clerical Checking	155	047	-018	-006	112	072	-097	029	236	378		438	181	369	918	463	047	011	536	246	229	229	058	217	153	214
45	69	R-440	Object Inspection	313	191	081	110	166	176	-135	106	328	479	438		059	140	361	723	294	373	324	850	454	265	090	059	071	160
46	70	A-410	Arith Computation	124	-014	168	252	221	294	048	277	626	116	181	059		269	224	272	-497	-167	-028	-125	192	237	117	181	119	149
47	71	A-420	Table Reading	-023	-018	-010	125	041	100	082	118	076	585	369	140	269		495	452	-237	-453	-134	-149	198	124	001	312	057	137
48	72	A-430	Clerical Checking	078	-004	-020	-001	026	017	-058	-046	140	322	918	361	224	495		538	-112	-188	158	095	193	199	046	297	117	213
49	73	A-440	Object Inspection	177	034	-020	042	119	105	-033	080	229	452	483	723	272	452	538		-070	002	058	250	404	184	023	191	070	193
38	74	F-410	Arith Computation	206	154	111	084	185	173	-117	110	365	206	047	294	-417	-237	-112	-070		486	536	465	142	107	130	-132	118	156
39	75	F-420	Table Reading	174	214	201	076	182	166	-225	065	257	459	011	373	-167	-453	-188	002	486		429	521	167	066	005	-246	-035	052
40	76	F-430	Clerical Checking	220	125	-001	-013	025	144	-118	084	290	257	536	324	-028	-134	158	058	536	429		410	074	146	047	-093	132	080
41	77	F-440	Object Inspection	303	234	128	122	142	166	-164	087	285	326	246	850	-125	-149	095	250	465	521	410		327	231	109	-064	046	077
50	78	A-500	Preferences	164	018	-049	071	193	171	-074	124	333	349	299	454	192	198	315	404	142	167	074	327		400	257	313	285	365
51	79	R-601	SAI: Sociability	218	-011	064	187	195	250	-117	169	350	184	229	265	237	124	199	184	107	066	146	231	400		531	437	517	569
52	80	R-602	" Soc.Sensitivity	131	123	066	086	218	197	-147	120	242	006	058	090	117	001	046	023	130	005	047	109	257	531		352	559	675
53	81	R-603	" Impulsiveness	-035	-104	-018	022	128	-032	102	076	087	217	059	181	312	297	191	-132	-246	-093	-064	331	437	352		356	314	
54	82	R-604	" Vigor	102	009	081	-021	218	135	-020	112	234	076	153	071	119	057	117	070	118	-135	132	046	285	517	559	356		496
55	83	R-605	" Calmness	097	011	021	161	295	241	-172	194	300	184	214	160	149	137	213	193	156	152	080	077	365	569	675	314	496	
56	84	R-606	" Tidiness	182	091	060	141	244	246	-105	179	368	129	263	232	204	082	171	173	160	052	171	193	337	630	697	339	562	764
57	85	R-607	" Culture	229	120	094	104	203	197	-141	122	284	116	239	191	137	128	205	143	152	-013	159	158	311	596	722	421	646	641
58	86	R-608	" Leadership	015	-116	-007	-050	-066	-073	-049	-082	-065	023	-057	-098	-011	180	203	-019	-057	-171	-216	-123	217	289	332	389	442	393
59	87	R-609	" Self-Confidence	117	009	-045	067	214	183	-089	129	230	042	229	229	121	108	203	206	111	148	136	163	396	462	520	163	280	506
60	88	R-610	" Mature Personality	126	051	-022	071	189	169	-095	114	217	075	215	181	125	062	101	131	092	055	054	153	286	491	604	242	563	631
	89	F-701	Int Inv: Phys Sci	250	108	058	085	084	105	-068	068	208	110	070	188	079	078	022	185	137	136	128	122	143	203	208	005	125	209
	90	F-702	" Biol Sci & Med	222	129	094	141	050	115	-022	093	105	100	-041	146	022	110	-051	173	090	-011	006	072	095	159	128	005	023	115
	91	F-703	" Pub Serv.	117	086	030	010	102	074	004	067	154	132	052	151	010	165	033	166	183	-036	059	085	147	197	200	100	111	188
	92	F-704	" Lit-Ling	008	091	033	029	-075	-067	034	-047	024	094	-003	045	-005	189	-004	138	133	-103	-000	-043	095	048	096	089	067	019
93	F-705	" Soc.Serv.	055	-048	103	067	-028	020	123	062	-104	074	-083	-021	-047	243	-042	131	-060	-185	-118	-129	055	020	044	182	-007	-037		
94	F-706	" Artistic	075	096	006	-089	-111	-126	-011	-115	-028	054	006	034	012	147	036	161	-146	-101	-062	-075	007	-039	-044	098	-055	-088		
95	F-707	" Musical	-004	039	018	035	-072	-029	081	004	049	037	-007	013	030	162	004	056	019	-137	-026	-024	088	-022	001	-076	021	021		
96	F-708	" Sports	008	-067	-054	035	-034	008	029	041	-068	066	-017	007	039	217	006	120	-123	-165	-029	-082	-018	071	088	107	-097	053		
97	F-709	" Outdr Rec.	105	-112	-054	056	136	124	-041	117	279	130	195	107	149	170	154	162	133	-043	158	072	099	164	146	044	108	173		
98	F-710	" Bus.-Mgmt.	067	029	062	020	-030	005	055	024	047	068	002	033	023	178	063	139	025	-127	-049	-060	137	112	194	151	161	147		
99	F-711	" Sales	090	019	035	008	-001	004	006	005	135	160	066	157	073	224	079	252	064	-070	-002	028	222	127	154	192	167	122		
100	F-712	" Computation	244	070	082	020	054	064	003	048	261	149	096	167	066	187	084	184	164	-075	061	094	104	188	170	171	119	128		
101	F-713	" Office Work	032	047	038	-040	002	-023	077	008	-054	-036	-017	-105	-002	184	038	021	-057	-241	-124	-143	053	081	139	155	197	124		
102	F-714	" Mech-Tech	224	142	124	072	160	140	-130	049	305	166	104	189	064	064	027	108	262	112	202	181	213	248	241	032	133	188		
103	F-715	" Skilled Trades	146	082	052	051	079	083	-032	061	215	175	155	166	-001	126	110	110	241	054	151	149	205	182	186	046	130	175		
104	F-716	" Farming	138	-030	032	082	112	123	082	110	203	123	085	110	093	162	147	134	200	-031	164	082	162	223	192	060	135	192		
105	F-717	" Labor	250	045	147	101	097	123	-143	057	320	163	144	173	126	099	059	144	206	071	234	132	249	315	234	174	190	241		
106	C-001	Composite: I.Q.Comp.	234	181	614	539	363	589	-051	500	515	230	050	219	278	012	-015	077	290	190	248	049	153	244						
107	C-002	" Gen.Acad.Apt.	292	240	341	539	577	700	-022	607	651	223	144	238	300	-068	029	068	365	319	296	281	229	304	347	068	256	306		
108	C-003	" Verbal	274	189	281	389	424	511	-069	425	624	193	207	255	259	-100	066	065	385	322	325	280	261	342	367	074	284	366		
109	C-004	" Quantitative	199	058	121	606	821	903	481	910	439	176	056	106	309	100	012	091	118	082	126	079	147	200	160	136	164	222		
110	C-005	" Technical	243	259	219	309	347	412	002	364	515	150	056	196	328	078	033	154	177	080	069	157	330	358	375	119	342	312		
**111	C-006	" Sci. Apt.	284	297	442	617	578	746	123	701	600	228	051	214	358	058	-007	111	240	187	144	215	213	293	313	100	260	309		

Table V-3b (continued)

IOI

	Tidiness	Outdoor	Leadership	Self-Confidence	Mature Personality	Phys Sci.	Biol Sci & Med	Pub Serv.	Lit-Ling.	Soc. Service	Artistic	Musical	Sports	Outdr Rec.	Bus.-Mgmt	Sales	Computation	Office Work	Mech-Tech	Skilled Trades	Farming	Labor	I.Q.Comp.	Gen. Acad. Apt.	Verbal	Quantitative	Technical	Sci. Apt.	MEAN	S.D.	Code
	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	MEAN	S.D.	
015	103	-128	005	050	-018	028	044	087	054	035	-000	190	083	138	042	130	122	087	063	037	105		101	136	097	201	234	212	7.7663 / 2.0000	2.5156 / .0000	
527	462	-021	348	313	232	156	155	-060	-082	022	-027	215	090	144	226	081	282	217	261	301		402	556	577	354	552	516		9.4417	2.4497	R-101
305	305	010	303	136	113	067	020	-106	-011	-101	-098	-158	-006	-010	023	168	094	149	098	062	204		515	576	608	294	572	569	4.9141	2.6185	R-102
330	317	-004	197	251	064	068	036	-032	-014	-041	044	-080	007	066	043	176	134	125	030	053	151		409	451	533	284	579	512	5.6503	2.6470	R-103
348	257	108	237	264	045	004	020	-002	-015	-059	020	016	010	094	067	120	138	091	064	055	132		276	321	322	237	435	373	2.8098	1.8776	R-104
361	307	-022	240	268	043	058	017	-036	-109	-103	072	-128	123	032	045	129	101	153	096	133	225		472	578	583	388	589	589	5.6196	3.3393	R-105
201	244	-010	247	207	-090	-055	-030	-058	-117	-084	-064	-089	015	-062	-020	-132	-072	-003	-034	068	044		222	421	417	447	419	405	3.4847	1.9075	R-106
311	285	-053	187	207	007	-051	041	-045	-041	-032	-036	-006	-037	062	083	047	092	091	021	097	159		443	561	556	353	688	606	3.5031	2.0589	R-107
276	226	-071	194	264	117	101	089	022	-065	-042	104	-101	042	100	089	120	137	184	130	125	178		373	439	440	240	572	489	2.7362	1.5941	R-108
203	241	-068	149	066	204	165	116	062	075	-030	160	-024	071	059	137	174	160	197	158	146	192		439	473	465	302	516	522	2.9202	1.6517	R-109
168	178	091	-052	139	038	077	083	048	071	118	C49	-002	-004	063	089	026	060	087	038	075	022		100	112	137	093	294	193	1.6933	1.2188	R-110
242	279	148	179	177	197	168	113	104	032	117	099	076	137	104	146	158	162	209	151	184	295		323	351	346	271	663	505	3.6319	1.9999	R-111
246	177	-007	274	116	032	-001	030	-046	-020	-140	059	-026	017	-039	042	085	059	064	066	012	156		389	490	515	302	703	565	4.4479	2.4318	R-112
300	314	030	176	222	048	004	098	-071	-010	-139	-026	-168	-077	006	091	141	033	064	048	061	183		424	550	543	381	582	571	3.8466	2.2211	R-113
392	389	039	287	270	189	114	104	033	-037	183	-047	083	047	064	159	170	237	083	267	023	144	318	485	573	563	350	512	555	6.3190	2.9684	R-114
286	270	081	213	226	056	060	025	-014	-028	-085	-018	-122	102	010	044	131	050	092	077	045	124		249	304	294	246	323	326	2.8098	1.6871	R-115
320	269	050	252	218	174	122	156	119	019	037	112	036	164	176	140	179	158	210	195	261	234		446	509	526	256	461	492	2.6196	1.8830	R-131
159	129	-057	137	101	-001	-066	-055	-066	-059	058	030	-024	083	011	-079	035	022	089	079	056	206		263	298	321	181	410	330	2.3804	1.4411	R-132
294	303	-031	211	207	214	085	227	065	000	027	095	-029	197	166	162	217	122	276	212	228	250		327	486	540	247	447	411	2.6135	1.7789	R-133
125	287	046	089	193	006	009	-033	-000	-085	-034	-041	-020	088	031	-055	006	079	069	069	103	173		305	316	306	161	306	335	1.2577	1.0634	R-134
159	058	-040	204	035	-047	-004	-059	-139	-005	-087	-029	-107	-047	-104	-053	-040	-049	060	007	074	050		276	366	366	317	338	377	1.5092	.9836	R-135
103	092	017	010	032	023	-045	005	-041	-072	-141	086	-148	046	-064	-074	027	-036	031	-040	011	-017		210	253	275	137	221	232	.6564	.7728	R-136
198	128	077	065	103	121	143	055	024	122	-060	014	079	-004	091	000	118	153	147	133	029	060		302	246	195	198	321	354	1.0491	.9481	R-137
034	-030	046	060	083	-076	-018	-061	-066	096	-117	042	033	019	-066	030	-028	-063	-081	-055	-025	-063		040	024	029	-004	020	018	1.0675	1.0252	R-138
299	336	067	139	166	157	135	117	017	029	-032	042	-050	160	-004	049	089	023	129	077	141	194		227	260	279	197	333	304	2.1595	1.5592	R-139
235	268	-139	239	101	244	169	145	-002	076	021	086	-081	023	-064	139	158	084	265	162	197	277		387	453	483	209	371	407	1.5399	1.0729	R-140
218	203	069	150	041	130	076	062	005	150	000	022	-029	077	047	193	183	-009	171	075	072	118		182	222	257	101	286	227	.6074	.7733	R-141
299	226	093	228	196	105	-015	060	-128	-065	-091	-134	-088	007	-013	C78	071	046	117	085	156	166		281	370	400	206	380	346	3.1654	2.1210	R-142
049	099	-107	-049	054	208	141	147	218	101	130	-091	263	096	155	157	144	100	145	258	246	258	268	134	185	215	054	193	162	.8037	.7274	R-143
156	264	-093	175	135	096	100	148	066	078	004	040	078	112	055	059	123	-077	142	132	061	144		223	314	310	305	315	323	.3926	.5713	R-144
021	003	026	-004	049	-016	006	124	038	174	003	029	110	025	027	073	061	030	-053	004	005	001		127	167	124	267	197	221	.8466	.7502	R-145
250	172	110	133	178	-007	-072	-012	-010	-117	020	-077	027	-040	-062	150	-088	153	-029	-022	-033	021		205	078	105	034	144	079	.8098	.7479	R-146
240	288	-024	244	131	141	078	131	155	138	095	205	030	208	151	104	117	126	148	151	202	147		313	398	404	286	488	444	2.0798	1.5435	R-147
107	118	-071	281	031	190	251	138	051	142	043	057	060	089	128	111	201	047	232	149	191	227		371	361	320	202	324	385	.5215	.5702	R-148
317	280	-047	103	143	303	175	230	181	141	079	165	-022	178	200	261	202	139	358	284	253	358		214	304	325	172	322	293	1.0491	.8520	R-149
165	147	-098	149	C16	114	046	143	045	060	-003	-003	C34	177	108	129	164	064	220	184	122	282		406	426	406	239	404	431	1.9018	1.2483	R-150
233	116	197	227	225	153	073	-021	081	-028	007	110	047	107	023	060	201	068	086	064	134	113		-012	087	110	092	132	063	.5644	.7116	R-151
256	274	-140	093	188	074	006	085	-032	-003	-094	-071	-021	-035	-009	-008	070	085	083	090	062	128		378	423	416	238	295	392	2.1534	1.3033	R-152
281	293	-045	233	150	110	017	196	028	-004	-042	028	003	175	072	096	117	037	188	129	151	262		461	497	515	264	332	442	2.4479	1.8195	R-162
361	367	-015	335	173	137	057	113	-062	-012	-094	-057	-112	083	039	064	180	187	192	135	120	278		603	665	697	344	579	632	7.3620	3.6308	R-172
483	454	031	349	331	137	017	092	-025	-032	-090	044	-099	075	C76	122	200	136	220	147	160	295		599	732	750	486	846	781	63.8282	21.1644	R-190
449	415	C16	332	270	233	136	176	092	048	-067	100	-015	200	127	156	215	131	298	234	218	346		552	671	694	407	699	676	32.2400	11.6770	R-192
493	460	027	359	324	174	116	126	000	003	-064	066	-074	124	048	140	214	140	258	185	210	326		609	743	764	480	832	778	96.0600	31.4150	R-100
134	071	-124	136	C68	045	-076	-C51	-103	-177	-116	-020	-093	025	-065	-008	-C34	-100	096	-008	100	143		399	478	470	192	276	309	7.0307	3.2516	R-211
226	159	-015	059	160	065	027	042	-008	-018	-058	-051	-103	138	036	013	077	-094	125	133	073	147		331	476	489	268	276	356	6.7423	3.6508	R-212
385	323	046	291	222	126	113	148	019	020	-076	020	-055	028	029	108	131	036	117	141	105	195		511	577	579	313	421	528	6.2270	4.0526	R-220
237	198	-046	119	142	062	058	061	-036	-176	-162	-015	-075	099	-015	-038	333	-045	110	045	159	148		515	685	685	356	342	505	5.5399	2.7538	R-231
302	204	-037	229	132	083	-024	066	-002	-067	-053	006	-026	039	029	041	013	190	155	148	254	406		446	773	824	348	477	531	22.4847	7.0056	R-232
288	310	-086	241	150	099	014	137	-027	-047	-114	-040	-073	074	-014	019	067	-073	157	107	163	200		506	735	759	381	427	547	10.9509	3.9060	R-233
291	261	-027	283	155	144	077	070	-048	-049	-114	-009	-091	164	040	097	213	019	188	163	199	278		422	705	764	364	371	471	11.3681	3.3476	R-234
128	089	-202	126	-002	172	094	076	-032	-109	018	019	-052	166	-010	111	171	-090	210	201	146	230		414	576	592	286	291	414	5.3988	2.4809	R-235
344	284	-096	275	160	139	032	108	-024	-084	-109	-011	-073	119	014	C59	123	-030	226	177	209	297		593	926	971	453	524	653	55.7423	19.1782	R-230
071	088	-065	113	131	-051	-034	-036	-108	-063	-092	-032	-030	-034	-018	005	-081	-049	-053	-051	290	242	204	167	277	307	5.0613	2.2130	R-240
259	225	-129	269	115	104	028	119	-016	-027	-057	083	-063	072	035	064	136	039	153	086	109	213		867	760	644	381	571	780	13.1840	6.4313	R-250
022	038	-202	-064	C20	-003	021	-018	-002	-040	-094	-066	-088	-011	-016	002	004	-057	-036	046	-006	206		296	393	276	358	325	487	4.0368	2.2440	R-260
080	131	-013	051	119	097	135	109	107	061	082	078	124	106	118	043	167	057	107	063	040	113		310	243	178	212	565	451	4.8712	2.3443	R-270
182	229	015	117	126	250	222	117	008	055	075	-004	008	105	067	009	244	132	224	196	138	250		234	292	274	199	243	284	6.1288	4.3887	R-281
091	120	-116	009	051	108	129	084	C91	-048	096	039	-067	-112	029	017	070	047	142	082	-030	045		311	240	189	058	259	297	5.0675	2.3071	R-282
060	094	-027	-045	-C22	058	014	008	033	103	006	-018	-044	-054	062	-035	007	-038	124	052	037	147		614	341	281	121	219	442	4.3190	2.3166	R-290
141	104	-050	067	071	085	141	010	-029	067	-089	035	053	056	020	018	070	-040	072	051	082	101		596	539	389	606	309	617	3.6687	2.0459	R-311
244	203	-046	214	189	084	050	102	-075	-028	-111	-072	-034	136	-010	-001	136	100	100	079	112	097		363	577	424	621	347	578	4.8957	2.3924	R-312
246	197	-073	183	169	105	115	074	-067	020	-126	-029	C08	124	065	064	05	-023	110	083	123	123		589	700	511	903	412	746	8.5644	3.5452	R-320
-105	-141	-049	-089	-C95	-068	-022	004	034	123	-011	081	029	019	055	C06	-C64	077	-130	-032	022	-143		-051	-022	-069	481	002	123	1.8650	1.4552	R-333
179	122	-082	129	114	068	013	067	-C42	-151	004	017	024	-075	034	017	024	005	034	061	116	057		500	609	425	970	364	701	10.4294	4.0246	R-340
368	284	-065	230	217	208	105	154	024	-104	-028	040	-068	279	047	135	100	-054	200	215	279	320		515	651	624	439	511	600	23.1104	9.9070	R-410
129	116	-026	242	075	110	100	132	094	074	054	037	066	130	008	110	117	-036	166	175	123	163		234	223	193	176	150	228	7.1472	4.4455	R-420
263	239	-057	229	215	070	-041	052	-003	-083	006	-007	-017	135	002	066	096	-017	104	155	085	144		050	144	187	056	058	051	29.6871	16.0960	R-430
232	191	-028	229	181	188	146	151	045	-021	034	013	017	033	157	167	-015	108	186	110	117	173		219	238	235	106	196	214	17.7055	7.7507	R-440
209	137	-011	121	125	077	022	-010	-005	-047	012	030	C39	149	023	073	100	-002	064	-001	093	126		278	300	259	309	328	358	31.4049	14.1755	A-410
082	128	160	108	C62	078	110	165	189	-243	147	162	217	176	178	224	187	184	064	126	152	099		012	-068	-100	101	078	058	14.7914	14.8367	A-420
227	205	035	203	226	022	-051	033	-004	-042	036	004	-006	154	035	079	044	038	027	110	023	059		-015	029	066	012	033	-007	37.8282	18.3504	A-430
173	143	-019	2C6	131	185	173	166	138	131	161	056	120	162	139	252	184	101	108	094	144		077	068	065	091	154	111	21.5583	8.4460	A-440
160	152	-059	111	C92	137	070	163	033	-060	-046	019	-123	133	025	064	104	-057	262	241	200	206		241	365	385	118	177	240	-.1773	35.6210	F-410
052	-013	-171	148	015	036	-011	-036	-103	-185	-101	-137	-165	-043	-120	-070	-075	-241	112	054	-031	071		244	319	322	082	080	187	-.4969	13.5438	F-420
171	159	-216	136	C54	128	006	059	-000	-118	-062	-026	-029	158	-049	-002	-61	-124	202	151	116	234		157	296	325	116	064	144	5.2638	25.8117	F-430
191	158	-113	163	153	122	072	065	-043	-121	-075	-024	-082	C27	-040	C28	094	-142	181	140	132	214		244	281	280	079	157	215	13.8528	11.0555	F-440
337	311	217	396	286	143	075	147	095	055	007	088	-018	099	137	222	104	053	213	205	162	249		099	229	261	147	330	213	50.3190	29.8634	A-500
630	596	289	462	491	203	159	197	208	020	-039	-022	071	164	112	127	188	081	248	182	223	315		190	304	342	200	358	293	4.8528	2.9170	R-601
697	722	332	520	604	208	128	200	096	044	-044	301	088	146	194	154	171	139	241	186	192	234		248	347	367	160	371	313	3.2147	2.1709	R-602
339	421	389	163	242	005	027	100	089	182	096	-076	107	044	151	142	171	155	032	064	060	174		049	068	074	136	119	100	1.6626	1.6963	R-603
562	646	462	280	563	125	023	111	069	-007	-055	020	-097	108	161	147	119	197	133	139	135	190		153	256	260	164	342	260	2.1656	1.7507	R-604
764	641	393	506	631	204	115	180	019	-037	-088	021	053	179	147	122	128	144	188	175	204	241		244	356	366	222	312	309	2.6258	1.9503	R-605
	701	340	483	716	197	101	157	-033	-111	-116	-003	-005	195	075	100	122	149	219	146	204	195		239	359	396	209	362	315	4.2515	2.4928	R-606
791		352	426	652	189	144	104	-013	-003	-105	-106	-104	-121	-003	-005	-131	-003	018	014	-023	014		219	309	347	168	348	290	4.0736	2.2650	R-607
340	352		C91	488	-114	-119	-104	-013	-033	-105	-106	-104	-121	-003	-005	-131	052	-163	-088	013	-024	013	-109	-082	-078	050	-058	1.0920	1.0352	R-608
483	426	091		427	105	039	071	-008	-073	-124	-027	-018	134	016	081	-51	052	143	104	082	099		182	245	316	179	252	227	3.9571	2.1412	R-609
716	652	408	427		-011	-048	-037	-147	-265	-186	-134	-142	061	-015	-074	-C8C	012	003	-015	063	-007		089	182	200	154	234	192	8.0982	4.1264	R-610
117	188	-114	105	-C11		814	646	647	452	539	530	534	593	625	690	740	475	818	817	669	633		118	138	148	036	134	118	58.0429	10.7211	F-701
101	144	-119	039	-048	814		608	638	539	486	505	504	525	608	591	692	380	693	690	589	514		099	040	047	062	117	112	27.8896	5.7489	F-702
152	164	-104	071	-037	646	608		687	511	521	502	513	541	661	661	606	347	640	684	627	487		086	115	115	059	125	104	37.8712	10.7026	F-703
-033	055	-105	-008	-147	647	638	687		654		5C1	512	485	279	643	520	538	436	439	530	362	434	042	-055	-073	-057	049	-0C1	48.7914	10.8650	F-704
-117	048	-013	-C73	-265	452	559	511	654		5C1	512	613	612	513	612	525	59C	721	517	006	-038	-03	-057	049	-0C1	026	008	027	33.2515	15.5034	F-705
-116	-025	-105	-124	-186	539	486	521		501		421	511	448	564	510	520	505	558	624	497	471		-061	-122	-112	-124	013	-072	22.5153	5.3256	F-706
-003	-024	-166	-027	-114	530	509	502	712	512	491		443	517	585	477	6C1	414	403	521	458	360		-033	-001	-013	-016	087	057	22.5166	4.2155	F-707
-005	-051	-104	-018	-142	534	504	513	613	485	511	443		525	512	589	472	516	426	495	532	508	414	-045	-075	-093	-011	029	-025	25.4969	5.5703	F-708
195	127	-131	134	C61	593	525	541	545	330	517	525		512	542	446	280	552	620	644	487		043	114	111	113	078	071	10.2147	2.7772	F-709
075	193	-003	016	-015	625	608	635	783	643	664	585	589	512		690	647	612	631	706	592	529		054	020	029	007	107	0-7	44.2283	8.8092	F-710
100	158	-009	081	-034	690	599	661	653	520	510	477	472	435	690		677	669	612	656	725	600	513	059	056	066	-000	130	078	20.3742	4.4167	F-711
122	164	-132	051	-C80	740	632	666	612	538	520	510	401	516	446	647	677		555	710	739	537	600	114	125	160	-006	175	121	33.4356	7.0457	F-712
149	150	-052	020	C12	475	380	597	526	436	5C5	414	426	280	612	509	555		433	443	406		004	-013	015	-004	153	C67	20.4785	6.5789	F-713
219	243	-163	143	003	818	633	640	590	439	558	474	426	280	612	564	710	433		853	708	743		173	211	238	040	2C0	186	57.C920	9.9069	F-714
149	186	-C15	082	063	817	690	684	712	530	624	521	512	620	706	725	739	520	853		720	742		100	218	133	047	188	133	66.1C43	11.7461	F-715
204	187	013	082	063	669	589	627	581	362	497	458	508	644	592	600	537	403	708	720		647		112	194	201	122	155	153	24.3252	5.1829	F-716
195	265	-020	099	-C07	633	514	487	513	340	414	471	360	414	487	529	513	600	647	742	647		231	303	316	055	266	229	36.6810	6.5760	F-717
239	219	-103	182	089	118	097	086	-006	042	-061	073	-045	043	054	059	114	030	173	093	112	231			802	657	478	560	878	75.8221	26.7148	C-001
359	300	-109	295	082	138	040	115	-038	-055	-122	-001	-075	114	020	066	16C	011	238	175	201	316		802		945	641	632	863	48.0525	16.5824	C-002
396	347	-082	316	200	148	047	115	-036	-053	-112	-013	-093	114	029	066	1C0	011	238	175	201	316		657	945		475	621	726	68.7546	18.6803	C-003
-204	168	-100	179	191	036	092	-057	026	-124	-016	-011	119	042	037	032	055	047	081	047	122	055		478	641	475		425	409	21.4418	16.0764	C-004
362	348	050	252	274	134	117	125	049	008	013	087	C29	078	107	130	175	153	200	128	122	266		560	632	621	425		809	20.8834	7.0574	C-005
315	290	-058	227	192	118	112	104	-001	027	-072	057	-025	0711	067	078	121	067	166	103	153	229		878	863	726	720	809		195.6012	57.2024	C-006

Table V-3 (continued)

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Table V-3c. 15-year-old girls irrespective of school status (Population from Tables V-3a and V-3b combined) (N=3992)

Code	Description	Grade	Screen	Vocab I	Liter	Music	Soc.St	Math	Phys.Sci	Bio.Sci	Sci Att	Aero&Sp	Elec&El	Mech	Farm	Home Ec	Sports	Art	Law	Health	Engin	Archit	Journ	For.Trav	Milit
	Grade		303	310	341	268	299	265	175	284	279	105	132	200	226	295	224	297	237	331	175	183	224	211	142
	Sex (1=M, 2=F)																								
R-101	Info I: Screening	303		379	356	347	399	264	293	296	358	152	231	298	362	432	294	348	272	417	244	235	268	234	168
R-102	Vocab I	310	379		721	670	733	658	630	619	588	429	410	511	576	553	545	678	560	610	446	454	546	571	395
R-103	Literature	341	356	721		664	723	642	551	571	533	387	358	410	497	447	504	675	512	554	389	465	524	567	375
R-104	Music	268	347	670	664		657	587	522	506	468	367	344	417	475	461	514	613	455	527	369	415	481	510	339
R-105	Soc.Studies	299	399	733	723	657		638	623	590	552	379	389	452	561	519	540	653	532	576	401	445	525	579	367
R-106	Math	265	264	658	642	587	638		575	522	482	351	374	386	449	402	478	533	445	468	360	400	442	455	330
R-107	Phys.Sci	175	293	630	551	522	623	575		577	462	395	498	448	516	440	447	510	424	479	389	349	404	460	293
R-108	Bio.Sci	284	296	619	571	506	590	522	577		457	336	363	454	531	459	425	509	404	516	383	349	404	442	283
R-109	Sci Attitude	279	358	588	533	468	552	482	462	457		267	289	404	465	462	389	504	421	480	325	322	397	410	248
R-110	Aero & Space	105	152	429	387	367	379	351	395	336	267		340	326	331	268	312	380	312	297	267	255	297	335	233
R-111	Elec & Electron	132	231	410	358	344	389	374	448	363	289	340		377	336	298	308	329	270	324	313	225	283	368	170
R-112	Mechanical	200	298	511	410	417	452	386	448	454	404	326	377		526	464	394	407	346	413	391	274	338	339	232
R-113	Farming	226	362	596	497	475	561	447	516	531	465	301	336	526		520	453	487	414	499	386	349	316	407	260
R-114	Home Ec	295	432	553	447	461	519	402	440	453	462	268	298	464	520		390	451	385	497	366	332	367	360	226
R-115	Sports	224	294	545	504	514	540	478	447	425	389	312	308	394	453	390		477	409	435	345	332	412	420	.00
R-131	Info II: Art	297	348	678	675	613	653	533	510	509	504	380	329	407	437	451	477		504	522	397	446	508	552	341
R-132	Law	237	272	560	512	455	532	445	424	404	421	312	270	346	414	385	409	504		437	326	341	412	418	290
R-133	Health	331	417	610	554	527	576	468	479	516	480	297	324	413	439	497	435	552	437		372	362	446	425	270
R-134	Engineering	175	244	446	389	369	401	360	389	383	325	267	313	391	386	366	345	397	326	372		280	323	306	219
R-135	Architecture	183	235	454	465	415	445	400	349	349	322	255	225	274	349	332	332	446	341	362	280		320	372	253
R-136	Journalism	224	268	546	524	481	525	442	404	404	377	297	283	338	336	367	412	508	412	446	323	320		411	272
R-137	Foreign Travel	211	234	471	567	510	579	455	460	442	410	335	308	339	407	360	420	552	418	425	306	372	411		313
R-138	Military	142	168	395	375	339	367	330	293	283	248	233	170	232	260	226	300	341	290	270	219	253	272	313	
R-139	Acct,Bus,Sales	253	302	575	539	512	569	486	436	421	419	318	290	374	418	422	413	534	466	470	329	352	456	442	105
R-140	Pract.Knowl.	275	414	486	447	421	464	368	349	376	424	236	249	355	378	439	374	491	390	477	324	301	373	367	222
R-141	Clerical	334	316	417	383	367	409	326	285	317	315	175	226	304	328	374	315	399	301	412	271	240	333	297	211
R-142	Bible	265	269	555	541	460	557	457	428	448	438	278	246	318	447	377	369	492	444	440	305	349	385	392	298
R-143	Colors	193	207	441	417	424	401	384	348	357	321	214	206	259	322	340	309	396	333	366	264	298	322	336	203
R-144	Etiquette	201	267	381	330	333	367	337	314	295	348	154	186	294	326	346	277	336	277	365	228	207	259	278	169
R-145	Hunting	075	075	128	088	078	088	083	112	131	042	084	105	157	153	130	128	104	095	112	152	087	081	077	050
R-146	Fishing	031	072	073	063	064	048	063	062	058	047	070	085	101	085	060	080	064	051	064	112	073	038	047	035
R-147	Outdr Act(Other)	237	315	553	493	480	523	466	464	462	444	310	323	412	466	458	452	522	409	484	383	311	373	411	253
R-148	Photography	208	277	394	352	332	375	285	260	271	341	169	220	281	320	323	274	384	299	377	277	230	278	278	165
R-149	Games	191	251	372	372	340	371	359	287	265	299	187	199	237	260	268	330	363	277	325	243	240	254	273	187
R-150	Theater,ballet	247	339	650	625	592	597	504	442	436	464	330	280	351	432	420	441	623	440	515	344	388	489	496	323
R-151	Foods	187	206	489	478	479	434	390	327	324	330	243	209	263	316	359	342	470	347	387	259	294	360	380	241
R-152	Miscellaneous	275	346	593	581	544	586	504	486	461	465	330	316	367	442	447	426	576	411	516	346	387	447	458	302
R-162	Vocabulary II	321	371	703	637	601	659	553	521	523	536	348	323	444	525	532	494	673	548	639	403	403	588	503	315
R-172	Vocab Tot. (I & II)	338	405	964	744	695	766	668	637	632	612	430	408	524	614	587	567	727	598	667	464	469	603	588	374
R-190	Info I Total	351	476	875	820	769	859	771	766	728	669	504	544	637	710	672	657	727	593	673	508	503	586	620	409
R-192	Info II Total	367	450	822	778	721	786	667	631	623	633	436	417	528	625	601	604	816	673	735	545	558	631	657	462
R-100	Info Total (I & II)	366	479	878	826	771	854	753	735	711	669	492	512	614	698	664	655	777	636	712	534	535	617	649	438
R-211	Memory for Sentences	147	231	326	274	245	301	277	289	265	266	152	175	203	255	250	214	280	247	285	187	189	211	221	140
R-212	Memory for Words	241	266	491	478	422	471	453	402	399	370	203	233	254	363	323	339	423	352	403	256	290	323	351	237
R-220	Disguised Words	292	336	580	545	529	514	490	394	404	451	269	242	342	383	409	379	535	383	488	313	348	415	425	265
R-231	English: Spelling	291	348	627	486	448	500	478	381	382	377	206	225	262	365	357	371	365	337	459	276	324	364	356	229
R-232	Capitalization	265	401	440	407	364	434	343	338	349	393	186	230	283	361	388	321	401	310	407	258	256	311	294	169
R-233	Punctuation	324	376	637	580	540	611	595	502	491	517	282	284	353	465	461	421	541	421	511	333	364	426	430	271
R-234	Usage	311	371	558	503	452	523	467	412	419	458	224	255	322	422	407	369	474	377	453	294	320	379	377	235
R-230	Total	285	311	446	440	412	442	394	397	347	439	211	188	266	356	374	306	442	349	407	244	276	339	340	193
R-240	Word Functions	251	257	601	566	494	575	625	478	471	475	269	265	316	422	376	421	482	426	451	318	356	402	427	296
R-250	Reading Comprehension	337	406	764	721	642	737	627	574	595	610	363	338	445	570	528	509	684	543	610	423	437	542	544	348
R-260	Creativity	223	272	577	512	488	522	481	470	441	443	342	326	432	470	451	425	510	420	457	368	394	400	430	281
R-270	Mechanical Reasoning	210	231	497	414	422	448	461	453	428	408	327	286	400	407	404	375	428	350	370	345	286	303	369	228
R-281	Vis. in 2 Dimens	199	237	360	302	306	329	339	293	281	304	183	188	272	280	320	276	321	249	212	246	215	218	254	144
R-282	Vis. in 3 Dimens	186	202	424	382	383	405	423	394	371	366	231	245	337	352	373	311	383	306	319	295	257	258	283	174
R-290	Abstract Reasoning	271	302	522	489	461	504	496	441	418	464	263	247	331	397	414	376	469	355	435	310	320	344	365	223
R-311	Math I	252	298	634	560	505	613	601	525	498	526	301	318	394	485	458	452	501	453	478	368	359	426	421	286
R-312	Math II	254	292	616	571	523	611	711	540	496	485	296	317	364	454	418	447	502	441	417	344	355	423	425	294
R-320	Math I & II	278	324	686	622	566	672	727	586	546	554	328	349	415	514	479	494	551	491	524	390	392	466	465	319
R-333	Math III	174	114	294	320	262	281	436	267	248	234	165	175	175	176	175	230	258	228	211	148	197	195	212	159
R-340	Math Total(I+II+III)	287	313	670	620	555	655	737	579	541	542	324	350	407	475	462	485	544	483	511	378	390	453	458	317
R-410	Arith Computation	263	421	463	407	388	477	460	393	351	389	175	259	279	330	375	379	391	309	429	294	272	342	299	200
R-420	Table Reading	190	197	150	157	140	148	149	100	121	113	066	074	084	042	148	142	116	106	150	107	089	127	127	075
R-430	Clerical Checking	158	128	081	096	068	071	107	028	042	056	038	053	012	029	058	058	089	057	081	063	059	075	065	036
R-440	Object Inspection	174	208	164	170	092	114	144	033	114	144	094	055	117	113	186	162	195	127	168	133	124	129	175	089
A-410	Arith Computation	175	323	346	309	290	358	374	308	258	281	130	217	261	282	267	301	288	228	305	228	215	264	279	166
A-420	Table Reading	083	058	020	024	029	071	051	041	015	017	002	018	008	031	010	053	034	005	002	019	005	020	038	035
A-430	Clerical Checking	101	057	007	017	003	012	037	032	020	016	002	016	034	089	012	006	012	000	006	018	009	010	002	001
A-440	Object Inspection	127	151	084	100	096	078	087	064	093	064	062	051	078	038	116	112	119	065	089	085	082	073	070	059
F-410	Arith Computation	234	359	409	352	342	417	363	326	316	357	156	195	257	357	349	310	351	277	400	247	225	289	257	152
F-420	Table Reading	209	243	210	216	186	209	178	152	170	189	102	096	136	171	214	166	235	158	231	145	132	174	157	081
F-430	Clerical Checking	225	240	246	244	201	230	223	154	165	178	104	116	110	117	192	178	229	162	220	140	151	191	180	107
F-440	Object Inspection	188	226	208	207	198	189	185	151	175	134	105	105	142	138	215	180	233	159	217	153	138	155	151	101
A-500	Preferences	051	165	034	036	028	027	014	015	035	003	006	046	057	051	038	082	045	024	048	053	042	029	027	019
R-601	SAI: Sociability	159	239	119	104	138	098	089	042	061	115	031	058	068	101	134	131	109	054	094	099	101	067	046	
R-602	Soc.Sensitivity	175	244	224	212	229	206	180	144	173	198	102	112	103	161	196	145	216	136	218	124	105	189	100	
R-603	Impulsiveness	158	107	158	154	147	126	116	102	104	102	093	075	090	092	083	125	135	120	083	082	094	107	119	098
R-604	Vigor	138	190	194	163	196	157	158	125	144	144	081	092	147	165	171	192	157	091	191	165	081	153	100	080
R-605	Calmness	136	207	209	169	196	186	189	145	149	172	101	126	137	159	192	154	182	134	199	152	102	164	126	111
R-606	Tidiness	127	228	146	121	150	138	115	095	052	102	035	090	067	090	168	094	130	054	179	110	085	117	070	063
R-607	Culture	159	231	265	251	284	242	221	197	208	193	116	132	146	181	207	161	230	152	229	151	149	204	161	125
R-608	Leadership	031	067	103	105	146	099	134	067	061	081	036	038	032	044	056	099	084	051	066	061	063	091	057	090
R-609	Self-Confidence	103	145	158	148	178	147	153	099	112	133	084	103	118	120	124	131	138	118	144	116	080	114	109	078
R-610	Mature Personality	141	197	255	229	243	243	266	204	155	179	133	144	142	170	176	210	156	156	218	167	143	141	161	138
F-701	Int Inv: Phys Sci	003	071	-186	-174	-138	-194	-285	-216	-202	-108	-146	-114	-094	-089	-041	-112	-132	-122	-078	-088	-109	-107	-118	-113
F-702	Biol Sci & Med	-066	-003	-215	-201	-193	-199	-242	-208	-239	-120	-121	-094	-111	-122	-102	-138	-169	-121	-166	-124	-126	-143	-134	-124
F-703	Pub Serv.	033	079	-037	-068	-040	-076	-086	-031	-038	012	-021	-008	021	019	055	-037	-029	-045	029	-003	-027	-046	-033	-039
F-704	Lit-Ling.	-026	-022	-220	-246	-208	-228	-224	-180	-188	-108	-128	-095	-082	-138	-054	-141	-201	-157	-134	-091	-141	-181	-151	-124
F-705	Soc.Serv.	-032	-028	-052	-048	-050	-067	-106	-031	-050	-051	031	-004	022	-029	-039	-040	-035	-020	-048	-026	-037	-063	-017	-051
F-706	Artistic	-050	-042	-222	-243	-205	-210	-199	-188	-220	-167	-138	-099	-117	-160	-115	-133	-237	-123	-152	-132	-160	-170	-171	-100
F-707	Musical	016	034	-118	-123	-191	-101	-145	-119	-105	-037	-060	-062	-062	-077	-003	-050	-068	-054	-041	-054	-067	-064	-066	-096
F-708	Sports	-007	-034	-134	-141	-121	-136	-154	-125	-145	-084	-108	-067	-096	-126	-062	-196	-118	-078	-080	-117	-100	-103	-109	-095
F-709	Outdr Rec.	023	049	-076	-090	-054	-062	-075	-093	-132	-038	-104	-057	-112	-116	-048	-070	-156	-078	-026	-083	-060	-123	-087	-063
F-710	Bus.-Mgmt.	-023	-050	-076	-023	-023	-025	014	016	027	-003	031	026	045	-003	018	-058	-026	-083	-069	015	-025			
F-711	Sales	034	086	016	024	031	009	-011	000	015	014	012	-008	001	041	003	040	-003	018	004	035	013	016	000	010
F-712	Computation	042	072	054	100	077	023	-029	013	033	027	039	-016	005	041	005	017	081	034	053	020	042	024	091	031
F-713	Office Work	046	043	206	248	207	200	198	175	175	158	130	100	027	060	055	140	084	145	119	070	124	134	052	037
F-714	Mech-Tech	119	192	058	068	079	065	012	016	014	075	-000	027	000	047	086	065	084	031	116	050	026	061	054	007
F-715	Skilled Trades	101	151	099	101	113	103	066	067	046	083	052	054	043	067	088	078	115	073	121	071	047	074	089	038
F-716	Farming	-035	064	-063	-058	-032	-043	-041	-077	-103	-040	-095	-043	-133	-048	-051	-046	-045	-009	080	-027	-070	-064	-039	
F-717	Labor		172	129	150	151	132	092	078	071	128	054	061	036	045	079	094	156	101	140	067	072	103	111	068
C-001	Composite: I.Q.Comp.	345	407	771	717	647	745	673	607	606	635	371	355	463	581	554	530	674	544	614	438	446	533	539	346
C-002	Gen.Acad.Apt.	372	443	807	738	672	769	752	634	621	641	377	393	453	573	553	555	686	560	640	446	444	554	565	357
C-003	Verbal	399	476	829	787	676	755	676	602	605	623	372	375	464	598	569	543	700	557	650	431	467	561	560	372
C-004	Quantitative	294	314	698	656	592	668	644	604	558	549	347	370	418	562	504	507	567	496	523	389	411	473	479	335
C-005	Technical	263	359	731	632	608	683	636	819	735	548	573	658	713	623	557	535	603	497	567	495	409	476	530	337
C-006	Sci. Apt.	337	402	813	742	683	777	776	728	688	643	465	487	575	630	586	579	688	570	633	486	470	551	574	376

Table V-3c (continued)   103

	Acct,Bus,Sales	Pract.Knowl.	Clerical	Bible	Colors	Etiquette	Hunting	Fishing	Outdr Act(Other)	Photography	Games	Theater,Ballet	Foods	Miscellaneous	Vocabulary II	Voc.Tot.(I & II)	Info I Total	Info II Total	Info Tot(I & II)	Mem.for Sentences	Mem.for Words	Disguised Words	Spelling	Capitalization	Punctuation	Usage	Eff. Exp.	Eng. Total	Word Functions	Reading Comp.	Creativity	Mech. Reasoning	Code
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	
253	275	334	205	193	201	075	031	237	208	191	297	187	275	321	338	351	367	366	147	241	292	291	285	324	311	285	374	251	337	223	210	
302	414	316	269	207	267	075	072	315	277	251	339	206	341	371	405	476	450	479	231	266	336	348	401	376	371	311	461	257	406	272	231	R-101
575	486	417	555	441	381	128	073	553	394	372	650	489	593	703	964	875	822	878	326	491	580	527	440	637	558	486	666	601	764	577	497	R-102
539	447	383	541	417	330	088	063	493	352	372	625	478	581	637	744	820	778	826	279	478	545	486	407	580	503	440	608	566	721	512	414	R-103
512	421	367	460	424	333	078	064	480	332	340	592	479	544	601	645	769	721	771	245	422	529	448	364	540	452	412	557	494	642	488	422	R-104
569	464	409	557	401	367	088	048	523	375	371	597	434	586	659	760	859	786	854	301	471	514	500	434	611	523	452	636	571	737	522	448	R-105
486	368	326	457	384	337	083	063	466	289	369	504	390	540	503	668	771	667	753	277	453	490	478	343	595	467	394	576	625	627	481	461	R-106
436	349	285	428	348	314	112	062	464	260	287	442	327	486	521	637	766	627	735	289	402	394	381	338	507	412	339	502	478	574	470	453	R-107
421	376	317	448	357	295	131	058	462	271	265	436	324	461	529	632	728	631	711	265	399	404	382	349	491	415	347	502	471	595	447	428	R-108
439	424	315	438	321	348	092	047	444	341	299	464	330	465	536	612	669	623	669	266	370	451	377	393	517	458	439	550	475	610	443	408	R-109
316	236	175	278	214	154	084	070	310	169	187	330	243	330	348	430	504	436	492	152	203	269	206	186	282	224	211	280	269	363	342	327	R-110
290	249	226	246	206	186	105	085	323	220	199	280	209	316	323	408	544	417	512	175	233	242	225	230	284	255	188	303	265	338	326	286	R-111
374	355	304	318	255	254	157	101	412	281	237	357	263	367	444	524	637	528	644	203	256	342	262	283	353	322	266	378	316	445	432	400	R-112
418	378	328	447	322	326	153	065	466	320	260	432	310	442	525	614	710	625	698	255	363	383	365	361	465	422	356	498	422	570	470	407	R-113
422	439	374	377	340	346	130	060	458	323	268	420	359	447	532	587	672	601	644	250	323	409	357	388	461	407	374	503	376	528	451	404	R-114
413	374	315	169	309	277	128	080	452	274	330	481	342	426	494	567	657	604	655	214	339	379	371	321	421	369	306	453	421	509	425	375	R-115
534	491	399	492	396	336	104	064	522	384	363	470	576	673	727	727	816	777	280	423	535	453	401	541	474	432	578	482	684	510	378		R-131
466	390	301	444	333	277	095	051	409	299	277	490	347	441	548	548	593	673	636	247	352	383	337	310	421	377	349	452	426	543	420	350	R-132
470	477	412	440	366	365	112	065	484	377	325	519	387	516	639	667	673	735	712	285	403	488	459	407	511	453	407	563	451	610	457	370	R-133
379	374	271	305	264	228	152	112	383	277	243	344	259	340	403	464	508	545	534	187	256	313	276	258	333	294	244	358	318	423	368	345	R-134
352	301	240	349	298	207	087	073	311	230	240	388	294	387	403	469	503	558	535	189	290	348	324	256	364	320	278	388	360	437	349	286	R-135
456	373	333	385	322	259	081	038	373	298	254	489	360	447	588	603	586	631	647	211	323	415	384	311	426	379	339	460	402	542	400	303	R-136
442	367	297	392	336	278	077	047	411	278	273	496	380	458	503	588	620	657	649	221	351	425	350	294	430	377	340	452	427	544	430	369	R-137
305	222	211	298	203	169	050	033	253	165	187	323	241	302	315	394	409	442	438	140	237	265	229	169	271	235	193	276	296	348	281	228	R-138
423	368	430	333	304	076	046	415	336	302	529	380	471	634	648	627	706	671	248	357	421	377	334	460	395	367	485	449	576	434	353		R-139
423	369	366	276	319	083	071	427	325	319	468	325	447	511	532	543	625	586	248	307	401	355	395	433	388	327	493	360	512	398	326		R-140
368	369	275	226	267	104	062	348	280	235	390	268	357	421	450	462	526	497	171	260	363	351	308	381	336	302	424	274	419	320	255		R-141
430	366	275	296	294	076	068	383	289	264	431	273	471	502	577	599	695	644	260	371	394	366	319	481	401	330	482	461	590	407	329		R-142
333	276	226	296	236	068	015	303	231	220	381	321	372	413	464	478	513	503	200	331	388	343	254	384	310	285	398	359	422	346	292		R-143
304	319	240	294	236	074	026	334	224	234	251	311	368	405	430	469	455	176	267	313	285	271	389	321	291	396	336	395	291	287			R-144
076	083	104	076	068	074	077	129	085	079	075	053	098	089	123	148	191	167	054	076	073	070	071	089	075	058	095	054	103	139	101		R-145
046	071	062	068	015	026	077	087	042	027	035	017	056	072	092	141	112	031	026	065	048	034	031	007	044	029	058	057	026				R-146
415	427	348	383	303	336	121	087	323	335	467	353	461	574	602	629	681	663	226	327	403	337	340	447	383	352	470	412	545	441	429		R-147
336	325	280	289	231	224	085	082	323	242	352	244	325	406	428	424	493	459	189	251	334	247	302	359	348	311	408	292	430	298	250		R-148
302	319	235	267	220	224	079	042	335	242	329	266	318	364	397	421	479	453	178	259	302	269	250	331	283	248	348	290	365	300	275		R-149
529	468	390	431	381	334	075	027	467	352	329	477	332	643	607	670	754	717	248	402	522	446	376	501	462	420	553	460	644	479	377		R-150
380	325	268	273	321	251	053	035	353	244	266	477	394	456	513	504	563	538	163	290	403	315	242	348	312	307	379	328	449	352	282		R-151
471	447	372	471	311	078	072	461	325	318	532	394	602	641	661	729	697	703	264	456	528	381	505	409	379	530	458	598	464	395			R-152
654	511	421	502	413	368	089	056	574	406	364	643	456	602	868	747	805	787	294	450	553	494	436	679	510	460	622	540	707	521	435		R-162
648	532	450	577	464	405	123	072	602	428	347	697	513	641	868	893	878	910	339	513	614	554	472	663	582	513	700	624	800	599	511		R-172
627	543	462	599	478	430	148	092	629	421	421	670	504	661	747	893	897	986	354	531	603	553	493	687	590	510	716	646	813	635	560		R-190
706	625	526	695	513	469	191	141	681	493	479	754	563	729	805	878	897	956	350	519	628	555	491	665	581	519	709	615	816	625	523		R-192
671	586	497	649	503	455	167	112	663	459	453	717	538	703	787	910	986	956	362	540	627	547	505	696	602	526	731	635	848	569			R-910
248	248	171	260	200	176	054	031	226	189	178	248	163	264	234	339	354	350	362	397	266	289	308	362	325	287	399	287	361	298	220		R-211
357	307	260	371	331	267	076	026	327	251	259	402	290	406	450	531	519	540	397	433	354	358	516	420	373	535	471	596	405	313			R-212
421	301	363	394	388	313	073	065	403	334	302	522	403	456	553	614	603	628	627	266	433	561	396	569	511	452	622	524	633	508	407		R-220
377	355	351	366	343	285	070	048	337	297	269	446	315	422	494	564	553	555	561	289	453	561	492	528	466	761	509	599	388	277			R-231
314	395	308	319	254	271	071	048	340	302	250	376	242	381	436	472	493	491	505	308	358	396	492	579	542	462	786	357	480	352	300		R-232
460	433	308	481	384	389	081	034	447	351	351	501	348	525	579	663	687	665	676	362	516	569	613	573	641	547	877	626	696	499	452		R-233
375	388	316	401	310	321	075	031	383	348	283	462	312	409	516	582	590	581	602	325	420	511	528	542	641	529	814	478	581	431	375		R-234
347	377	302	330	285	291	058	007	352	311	248	420	307	379	460	513	510	519	506	287	373	452	400	462	547	529	708	418	551	373	314		R-235
485	493	424	482	398	396	095	004	470	408	348	553	379	530	622	700	716	709	731	394	535	622	761	786	877	814	708	603	715	515	445		R-230
449	360	274	461	359	336	054	029	412	292	290	460	328	456	540	624	646	615	651	287	471	524	509	357	626	478	418	603	665	491	440			R-240
576	512	419	540	422	395	103	058	545	430	365	644	449	598	707	800	813	816	835	361	516	633	559	480	676	581	551	715	665	627	523		R-250
414	398	329	407	346	291	119	057	392	300	329	477	352	466	521	599	635	625	648	299	435	508	388	352	499	431	313	515	491	627	511			R-260
353	324	255	329	292	287	101	026	429	250	275	377	282	395	435	511	566	523	565	220	313	407	277	300	459	375	334	523	440	523	511		R-270
263	290	233	239	227	233	083	038	308	229	243	293	201	270	306	307	406	393	411	183	235	368	264	262	319	304	263	369	328	396	389	471	R-281
307	280	240	300	294	251	096	021	337	229	235	328	240	342	371	443	499	452	492	179	301	360	273	273	435	334	314	416	444	500	464	563	R-282
383	384	299	365	352	319	073	014	399	252	278	422	315	428	435	551	588	561	593	265	392	492	415	410	570	466	431	582	530	609	497	546	R-290
500	401	333	459	353	353	093	047	447	321	302	482	360	488	560	656	693	650	694	333	465	478	400	426	618	513	455	661	616	656	510	466	R-311
452	376	307	461	364	342	095	041	446	313	332	481	333	499	540	634	696	640	694	311	474	478	510	440	640	514	431	644	637	626	486	458	R-312
520	426	351	506	395	381	103	048	491	348	350	529	379	543	606	726	764	709	763	353	516	525	564	477	693	565	487	701	690	703	566	537	R-320
258	176	168	202	183	163	084	037	225	135	211	247	181	234	227	291	350	322	349	128	235	250	222	173	292	237	189	360	323	288	260	252	R-333
517	413	347	489	386	373	110	055	484	341	355	522	374	530	585	688	752	697	751	342	509	518	528	458	674	551	474	680	683	684	539	502	R-340
373	402	339	345	267	299	093	066	375	304	303	376	257	404	443	490	533	522	542	327	416	463	529	502	564	460	382	622	470	484	384	312	R-410
140	168	187	101	088	122	053	045	136	135	126	179	126	146	182	173	176	205	191	115	141	298	192	163	181	152	113	204	164	200	180	156	R-420
082	097	104	027	082	070	024	041	051	061	063	105	089	061	080	087	082	108	094	059	095	315	173	090	112	078	050	163	116	110	110	087	R-430
135	105	091	126	128	066	020	167	142	117	178	125	169	175	181	198	218	210	108	165	309	172	173	188	155	133	208	188	233	235	252		R-440
281	294	267	261	194	225	077	068	279	219	241	275	188	304	313	360	404	393	410	257	334	375	414	383	438	339	260	472	375	348	298	234	A-410
031	011	054	014	020	036	031	016	024	023	053	054	024	023	023	039	029	017	010	017	059	146	054	005	022	011	035	013	048	019	058	039	A-420
018	023	040	028	028	022	013	033	005	016	021	033	013	006	007	010	014	002	007	027	224	081	011	014	007	035	043	009	038	025			A-430
070	118	104	035	067	074	056	013	103	080	084	100	087	091	117	126	132	051	094	243	100	065	049	098	116	137	168	118	134				A-440
326	363	280	299	243	262	042	031	334	281	246	340	232	355	415	442	461	455	471	271	334	368	440	451	473	412	373	526	381	448	322	274	F-410
184	245	233	143	120	167	046	039	192	171	170	221	140	201	255	242	246	274	263	159	157	313	240	253	255	221	207	299	204	285	217	201	F-420
193	227	210	140	173	153	040	043	172	163	145	253	183	264	259	280	273	152	209	402	315	234	291	239	208	236	295	231	195				F-430
163	234	172	127	156	153	066	010	194	167	142	210	134	201	223	229	244	262	257	140	198	315	207	227	243	210	186	273	220	282	261	272	F-440
032	063	081	021	025	047	045	050	048	017	069	019	042	018	030	050	067	057	042	040	096	010	032	052	010								A-500
112	184	127	059	102	127	011	045	129	146	103	130	105	123	137	135	157	146	091	089	168	147	169	146	141	113	245	102	121	104	087		R-601
174	189	148	168	142	131	018	055	163	160	135	160	135	124	167	224	245	295	252	122	155	232	216	171	220	197	163	245	189	239	159	111	R-602
128	077	095	125	081	073	045	040	115	089	105	152	102	112	114	153	158	170	167	045	077	115	054	031	068	060	046	066	076	120	086	076	R-603
134	174	183	131	113	125	036	037	197	146	100	158	118	186	131	216	225	232	236	099	118	182	166	147	175	169	120	200	146	185	148	151	R-604
166	184	153	152	106	144	050	061	163	132	114	172	110	164	208	224	232	236	239	079	136	192	182	148	172	171	124	209	171	204	160	113	R-605
117	148	163	073	090	110	009	042	143	059	124	088	116	162	149	160	161	166	089	108	155	188	151	116	197	122	145	097	064				R-606
193	223	163	099	167	152	031	057	176	157	109	216	176	206	241	276	288	282	243	122	171	220	221	169	230	186	159	244	210	247	173	117	R-607
091	068	068	099	071	073	003	072	053	064	089	097	082	063	115	119	170	059	097	127	100	023	069	057	032	077	110	076	067	038			R-608
129	178	110	131	082	106	056	004	136	122	095	136	089	135	169	183	189	190	084	114	174	142	124	160	137	094	109	134	157	133	109		R-609
221	181	190	141	134	051	077	172	115	118	194	146	266	253	285	278	290	131	181	215	246	136	237	185	137	230	245	185	111				R-610
-123	-018	-023	-189	-091	-026	-022	-019	-077	-015	-067	-075	-051	-131	-108	-171	-208	-155	-194	-072	-116	-064	-077	-025	-105	-057	-038	-062	-191	-168	-145	-158	F-701
-136	-076	-065	-187	-122	-053	-040	-013	-144	-055	-079	-126	-128	-117	-162	-221	-232	-207	-249	-090	-132	-121	-130	-035	-124	-091	-095	-116	-128	-035	-154	-129	F-702
-039	008	-008	-055	-096	045	012	-007	022	002	-013	-012	003	-031	-001	-026	-037	-026	-034	-016	-026	002	068	061	011	030	024	032	-053	-021	-026	025	F-703
-172	-084	-087	-241	-104	-077	-017	-026	-101	-101	-066	-198	-118	-165	-178	-221	-231	-229	-236	-091	-152	-157	-153	-046	-167	-135	-117	-152	-199	-241	-161	-064	F-704
-051	-024	-030	-102	-103	-024	-030	-017	-026	-007	-035	-021	-058	-043	-045	-053	-058	-067	-053	-061	-057	-100	-022	-075	-076	-117	-108	-044	-020				F-705
-146	-116	-083	-192	-139	-086	-002	-029	-116	-112	-075	-194	-129	-170	-199	-230	-239	-232	-243	-092	-173	-155	-130	-071	-185	-141	-133	-145	-180	-230	-201	-165	F-706
-060	006	-009	-160	-029	-070	-020	-014	-027	-018	-014	-088	-022	-079	-054	-076	-075	-061	-056	-022	-052	-092	-105	-103	-088	-044						F-707
-096	-071	-055	-171	-064	-054	-052	-041	-128	-070	-091	-108	-051	-173	-102	-132	-166	-155	-166	-057	-086	-080	-084	-041	-102	-080	-057	-092	-127	-136	-113	-132	F-708
-021	006	-040	-055	-003	-020	-092	-053	-080	-022	-024	-037	-016	-038	-045	-070	-103	-080	-072	-030	-036	-014	009	009	004	009	-072	-096	-057				F-709
-022	017	-022	-002	019	035	023	-019	040	011	024	005	017	003	024	018	017	016	-017	-004	-002	034	015	060	016	032	011	007	-008	-014	-009	-037	F-710
-022	036	023	021	013	017	-008	019	036	021	-011	-000	031	031	052	040	020	020	013	006	023	049	064	043	077	059	049	036	-022	048	010	-008	F-711
-005	023	-027	-030	043	037	016	039	024	038	047	023	106	080	043	052	040	067	051	013	008	066	012	-042	-005	055	049	036	-022	048	008		F-712
118	070	024	154	113	087	-030	131	081	089	186	157	147	138	076	218	198	208	201	050	086	109	096	093	143	164	119	016					F-713
044	034	088	059	092	-014	-010	070	096	089	116	077	069	095	076	068	097	081	043	045	117	097	151	104	108	099	093	144	084	025	016		F-714
074	117	067	-052	073	080	013	020	120	098	100	115	106	109	135	124	106	104	053	026	116	103	061	064	100	047	041						F-715
-026	010	037	-073	-001	-016	-069	-029	-064	-016	005	-015	-016	-037	-030	-055	-083	-054	-074	-001	-016	047	033	-000	007	-001	022	-030	-057	-078	-112		F-716
111	089	098	081	079	086	-012	026	103	112	132	105	129	152	157	134	134	133	138	167	134	168	083	066									F-717
584	521	423	577	445	420	106	051	557	425	376	632	452	607	712	867	835	818	850	378	542	644	578	515	729	615	572	758	710	943	651	591	C-001
598	539	451	588	464	441	114	060	573	442	406	652	461	632	735	841	873	844	885	414	588	673	694	645	839	730	647	899	734	891	669	570	C-002
592	548	469	571	445	429	111	060	561	447	404	666	475	628	735	865	862	845	877	403	576	672	715	713	827	780	687	952	667	816	591	505	C-003
531	421	357	506	407	381	109	056	502	340	376	542	395	550	703	715	792	722	786	339	519	536	544	453	689	556	473	688	700	700	550	517	C-004
516	449	371	484	398	362	162	090	571	345	347	524	389	557	616	743	884	747	857	312	433	492	413	404	570	482	404	578	539	677	604	723	C-005
605	522	430	583	465	430	139	071	601	416	406	636	462	636	720	839	919	850	917	386	556	634	572	512	738	616	545	754	723	879	718	672	C-006

Table V-3c (continued)

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Var*	Var	Code	Description	Vis. in 2 Dimens 58	Vis. in 3 Dimens 59	Abstract Reason. 60	Math I 61	Math II 62	Math I+II 63	Math III 64	Math Tot(I+II+III) 65	Arith Computation 66	Table Reading 67	Clerical Checking 68	Object Inspection 69	Arith Computation 70	Table Reading 71	Clerical Checking 72	Object Inspection 73	Arith Computation 74	Table Reading 75	Clerical Checking 76	Object Inspection 77	Preferences 78	Sociability 79	Soc. Sensitivity 80	Impulsiveness 81	Vigor 82	Calmness 83
	1		Grade	199	186	271	252	254	278	174	287	263	190	158	174	195	083	101	127	234	209	225	188	051	159	175	058	138	136
	2		Sex (1=M, 2=F)																										
1	3	R-101	Info I: Screening	237	202	302	298	292	324	114	313	421	197	128	208	323	058	057	151	359	243	240	226	165	239	244	107	190	207
2	4	R-102	" Vocab I	360	424	522	634	616	686	294	670	463	150	081	164	346	020	-007	084	409	210	246	208	034	119	224	158	194	209
3	5	R-103	" Literature	302	382	489	560	571	622	320	620	407	157	098	170	309	024	017	100	352	216	244	207	036	104	212	154	163	164
4	6	R-104	" Music	306	383	461	505	523	566	262	555	388	140	068	162	290	029	-003	096	342	186	201	198	028	138	229	147	196	196
5	7	R-105	" Soc.Studies	329	405	504	613	611	672	281	655	477	148	071	150	358	017	-012	078	417	209	230	189	027	098	206	126	157	186
6	8	R-106	" Math	339	423	496	601	711	727	436	737	460	149	107	150	374	051	037	087	363	178	223	185	014	089	180	161	158	189
7	9	R-107	" Phys. Sci	293	394	441	525	540	586	267	579	393	100	028	113	308	001	-032	064	326	152	154	151	015	042	144	102	125	145
8	10	R-108	" Bio. Sci	281	371	418	498	496	546	248	541	351	121	042	144	258	015	-020	093	316	170	165	175	035	061	173	104	144	149
9	11	R-109	" Sci Attitude	304	366	464	526	485	554	234	542	389	113	056	144	281	-017	-016	064	357	189	198	194	-003	115	198	102	144	172
10	12	R-110	" Aero & Space	183	231	263	301	296	328	165	324	175	066	038	074	130	-002	002	062	156	102	104	105	006	031	102	093	081	101
11	13	R-111	" Elec & Electron	188	245	247	318	317	349	175	350	259	074	053	075	217	018	016	051	195	096	116	092	046	058	112	075	092	126
12	14	R-112	" Mechanical	272	337	331	394	364	415	175	407	279	084	012	117	201	-008	-034	078	257	136	110	142	057	068	100	090	147	137
13	15	R-113	" Farming	280	352	397	485	454	514	176	495	390	092	-029	113	282	-031	-089	058	357	171	117	158	051	101	161	092	185	159
14	16	R-114	" Home Ec	320	373	414	458	418	479	175	462	375	148	058	186	267	010	-012	116	349	214	192	215	038	134	196	083	171	192
15	17	R-115	" Sports	276	311	370	452	447	494	230	485	379	142	058	162	301	053	-006	112	310	166	178	180	082	131	145	125	192	154
	18	R-131	Info II:Art	321	383	469	501	502	551	258	544	391	176	089	195	288	034	012	119	351	235	229	233	045	109	216	135	157	182
	19	R-132	" Law	249	306	355	453	441	491	228	483	309	106	057	127	228	005	000	065	277	158	162	159	024	054	136	102	091	134
20	R-133	" Health	272	319	435	478	477	524	211	511	429	150	081	168	305	-002	006	089	400	231	220	217	048	141	218	083	191	199
21	R-134	" Engineering	246	295	310	368	344	390	148	378	294	107	063	133	224	019	018	085	247	145	140	153	053	094	124	082	165	152
22	R-135	" Architecture	215	257	320	359	355	392	197	370	272	089	059	124	215	005	009	082	225	132	151	138	042	059	105	094	081	102
23	R-136	" Journalism	218	258	344	426	423	466	195	453	342	127	075	129	264	020	010	073	289	174	191	155	029	101	189	107	133	164
24	R-137	" Foreign Travel	254	283	365	421	425	465	212	458	299	127	065	125	229	038	002	070	257	157	180	151	027	067	150	119	109	126
25	R-138	" Military	144	174	223	286	294	319	159	317	200	075	036	089	166	035	-001	059	152	081	107	101	019	046	100	098	080	111
26	R-139	" Acct,Bus,Sales	263	307	383	500	452	520	258	517	373	140	082	135	281	031	018	070	326	184	193	163	032	112	174	128	134	166
27	R-140	" Pract.Knowl.	290	280	384	401	376	426	176	413	402	168	097	195	244	017	023	118	303	245	227	234	050	164	189	077	174	184
28	R-141	" Clerical	233	216	299	333	307	351	168	347	339	187	104	152	267	054	040	104	280	233	210	172	081	127	178	095	133	153
29	R-142	" Bible	239	300	362	459	461	506	202	489	345	101	027	091	261	011	-028	035	299	143	140	127	045	059	168	125	131	152
30	R-143	" Colors	227	294	352	353	364	395	183	386	267	088	082	120	194	014	-028	067	243	120	173	156	021	102	142	081	113	106
31	R-144	" Etiquette	233	251	319	353	342	381	163	373	299	122	070	128	225	020	022	074	262	167	153	153	025	127	131	073	129	144
32	R-145	" Hunting	083	096	073	093	095	103	084	110	093	053	024	066	097	036	013	056	042	046	040	066	047	011	018	045	056	050
33	R-146	" Fishing	038	021	014	047	041	048	037	055	066	045	041	020	068	031	033	013	051	019	043	010	045	045	053	040	037	061
34	R-147	" Outdr Act(Other)	308	337	393	447	446	491	225	484	375	136	051	167	279	016	-012	103	334	192	172	194	050	129	163	115	197	163
35	R-148	" Photography	229	229	292	321	313	348	135	341	304	135	061	142	219	029	005	080	281	177	163	167	048	146	160	089	146	132
36	R-149	" Games	243	235	278	302	332	350	211	355	303	126	063	117	241	023	016	068	246	170	145	142	017	103	135	105	100	114
37	R-150	" Theater,ballet	293	328	422	482	481	529	247	522	376	179	105	178	275	053	021	107	340	221	253	210	069	130	211	152	158	172
38	R-151	" Foods	201	240	312	360	333	379	181	374	257	126	089	125	188	054	013	084	232	140	183	134	019	105	150	102	118	110
39	R-152	" Miscellaneous	270	342	428	488	499	543	234	530	404	146	061	169	304	024	-013	100	353	201	205	201	042	123	187	112	184	164
40	R-160	" Vocabulary II	306	391	495	565	540	606	227	585	443	182	080	175	313	023	-006	087	415	255	244	223	018	137	224	114	191	268
41	R-172	Vocab Tot. (I & II)	367	443	551	656	634	708	291	688	490	173	087	181	360	023	-007	091	442	242	264	229	030	135	241	153	207	224
16	42	R-190	Info I Total	416	499	588	613	696	764	350	752	533	176	082	198	404	023	-010	117	461	246	259	244	050	135	245	158	216	232
	43	R-192	Info II Total	393	452	561	650	640	709	322	647	522	205	108	218	393	039	014	126	455	274	280	262	067	157	257	170	215	236
	44	R-100	Info Total (I & II)	411	499	593	695	694	763	349	751	542	191	094	210	410	029	-002	123	471	263	273	257	057	146	255	167	221	239
17	45	R-211	Memory for Sentences	183	179	265	333	311	353	128	342	327	115	059	108	257	017	007	051	271	159	152	140	042	091	122	045	099	079
18	46	R-212	Memory for Words	235	301	392	465	474	516	235	509	416	141	095	165	334	059	027	094	334	157	209	198	040	089	155	077	118	136
19	47	R-220	Disguised Words	368	366	492	478	478	525	250	518	463	298	315	309	375	146	224	243	368	313	402	315	096	168	232	115	182	195
20	48	R-231	English:Spelling	245	273	415	480	510	546	222	528	529	192	173	172	414	054	081	100	440	240	315	207	051	147	216	054	166	182
21	49	R-232	" Capitalization	262	273	410	426	440	477	173	458	502	163	090	173	383	-005	011	085	431	253	234	227	046	169	171	031	147	148
22	50	R-233	" Punctuation	370	435	570	618	640	693	292	674	564	181	112	188	438	022	014	090	473	255	291	243	-001	146	220	068	175	192
23	51	R-234	" Usage	304	334	466	513	514	565	237	551	460	152	078	155	339	011	-007	065	412	221	257	218	010	141	197	060	169	171
24	52	R-235	" Eff. Exp.	263	314	431	457	431	487	189	474	382	113	050	133	260	-035	-028	049	373	207	208	186	-032	113	163	046	120	124
25	53	R-230	" Total	369	416	582	631	644	701	280	680	622	204	116	208	472	013	017	098	539	299	324	273	022	185	245	066	200	209
26	54	R-240	Word Functions	328	444	530	616	637	690	323	683	470	164	116	188	375	048	043	116	381	204	236	220	-014	102	178	076	146	171
27	55	R-250	Reading Comprehension	346	500	609	656	626	703	288	684	484	200	110	233	348	019	000	137	448	285	295	282	009	121	239	120	185	204
28	56	R-260	Creativity	389	464	497	510	486	546	260	539	384	180	110	235	298	058	036	108	322	217	231	261	052	104	159	086	148	160
29	57	R-270	Mechanical Reasoning	471		362	546	466	458	567	252	502	312	156	097	252	234	034	025	178	274	201	195	272	010	087	111	076	151	113
30	58	R-281	Vis. in 2 Dimens		484	442	351	364	394	207	372	344	224	165	321	278	092	113	265	274	253	221	323	081	088	092	064	125	115
31	59	R-282	Vis. in 3 Dimens	494	548	453	444	535	250	566	292	155	094	266	214	034	027	141	264	204	193	286	-040	088	099	065	117	113
32	60	R-290	Abstract Reasoning	442	548		531	531	584	255	572	408	172	097	262	286	014	009	161	386	248	259	308	-051	088	144	033	142	130
33	61	R-311	Math I	351	446	531		652	889	313	855	502	144	050	142	387	028	-027	053	425	192	200	185	-019	096	170	103	126	166
34	62	R-312	Math II	364	453	531	652		927	411	908	554	169	082	173	448	051	005	100	420	209	223	214	007	092	176	083	156	184
35	63	R-320	Math I & II	394	494	584	889	927		402	972	583	174	074	175	462	044	-010	087	476	221	234	221	-006	103	191	101	156	193
36	64	R-333	Math III	207	235	255	313	411	402		575	246	100	110	121	232	088	080	103	148	167	136	118	021	043	081	047	062	105
37	65	R-340	Math Total(I+II+III)	392	500	572	895	908	972	575		568	176	081	181	458	059	007	099	453	210	238	220	001	105	191	100	151	196
42	66	R-410	Arith Computation	344	292	408	502	554	583	246	568		308	219	274	870	172	141	215	707	304	315	291	178	237	227	078	220	227
43	67	R-420	Table Reading	224	155	172	144	169	174	103	176	308		454	457	291	765	412	445	185	781	380	395	239	144	128	073	133	137
44	68	R-430	Clerical Checking	165	089	097	050	082	074	110	089	219	454		431	260	417	952	455	066	787	741	343	242	127	119	076	106	140
45	69	R-440	Object Inspection	321	266	262	142	173	175	121	181	274	457	431		261	321	387	903	160	385	372	926	234	157	112	056	125	124
46	70	A-410	Arith Computation	278	214	286	387	448	462	232	456	870					260	227	267	260	193	243	215	225	268	201	077	200	219
47	71	A-420	Table Reading	042	034	014	028	051	044	088	059	172	765	417	321	260		449	417	-038	176	196	188	242	092	083	091	085	099
48	72	A-430	Clerical Checking	113	027	009	-027	005	-010	080	007	141	412	952	387	221	449		451	-049	194	501	273	270	105	091	086	086	119
49	73	A-440	Object Inspection	265	191	161	053	100	087	103	099	215	445	455	903	267	417	451		-037	275	302	743	278	142	098	068	118	112
38	74	F-410	Arith Computation	274	264	386	425	440	476	148	453	707	185	056	160	260	-038	-049	037		318	269	245	026	164	155	014	143	130
39	75	F-420	Table Reading	253	204	248	192	209	271	067	210	304	781	287	385	193	196	194	275	318		388	421	131	130	115	023	120	113
40	76	F-430	Clerical Checking	221	193	259	200	223	234	136	238	315	380	741	372	241	196	501	302	249	388		374	092	132	137	027	113	136
41	77	F-440	Object Inspection	323	286	308	185	214	221	118	220	291	395	343	926	225	188	273	743	245	421	374		164	154	105	041	124	119
50	78	A-500	Preferences	081	007	-051	-019	007	-026	021	001	147	239	242	234	225	242	270	278	026	131	092	164		203	158	224	157	149
51	79	R-601	SAI: Sociability	088	024	088	096	092	103	043	105	237	144	127	157	208	092	105	142	164	130	132	154	203		536	258	544	445
52	80	R-602	" Soc.Sensitivity	092	099	144	170	176	191	081	191	227	128	119	112	201	083	091	078	155	115	137	105	158	536		227	468	614
53	81	R-603	" Impulsiveness	064	065	033	103	083	101	047	100	078	073	076	056	097	091	086	068	014	023	027	041	224	258	227		258	140
54	82	R-604	" Vigor	125	117	142	126	156	156	062	151	220	133	106	125	200	085	086	118	143	120	113	124	157	544	468	258		428
55	83	R-605	" Calmness	115	113	130	146	184	193	105	196	237	140	124	124	219	099	119	112	131	113	119	149	445	614	140	428		
56	84	R-606	" Tidiness	062	036	080	103	115	121	035	114	228	132	135	120	203	089	112	111	154	116	136	112	151	421	540	089	415	540
57	85	R-607	" Culture	090	071	144	192	203	218	093	214	230	117	072	133	167	080	099	084	161	102	124	104	164	467	635	251	581	
58	86	R-608	" Leadership	042	041	052	088	166	108	067	111	141	101	130	076	160	120	132	093	047	036	079	057	156	367	399	264	398	341
59	87	R-609	" Self-Confidence	096	081	093	125	136	144	072	143	179	103	134	107	165	064	118	095	113	096	120	121	141	316	130	327	420	
60	88	R-610	" Mature Personality	102	107	141	217	262	265	128	265	282	128	145	105	262	088	123	094	175	111	142	097	161	408	612	167	491	609
89	F-701	Int Inv: Phys Sci	-085	-170	-115	-182	-227	-227	-157	-231	-066	002	023	004	-074	-020	-019	008	-023	-120	002	-056	-046	-065	-090	-087		
90	F-702	" Biol Sci & Med	-052	-110	-111	-146	-181	-181	-121	-184	-078	-028	-055	-031	-074	-015	-036	-025	-045	-028	-074	-034	-024	-052	-142	-069	-175	-143
91	F-703	" Pub Serv.	027	-004		-031	-055	-049	-046	-051	012	017	027	010	017	-003	028	007	-035	-031	-026	-049	-072	-063	-062	-073		
92	F-704	" Lit-Ling.	-058	-097	-092	-171	-182	-195	-097	-194	-043	-002	-030	-015	-093	010	-013	002	-048	-013	-055	-027	-052	-088	-203	-139	-143	-159
93	F-705	" Soc.Serv.	001	-074	-029	-074	-108	-102	-056	-104	-065	-005	-006	-037	-064	-047	-094	-048	-040	-163	-207	029	-145	-174				
94	F-706	" Artistic	-116	-206	-186	-171	-172	-189	-102	-187	-084	-008	-018	-088	-067	014	006	-058	-068	-026	-066	-100	-047	-148	-099	-108	-118	
95	F-707	" Musical	-060	-098	-037	-060	-098	-089	-028	062	006	-034	022	016	010	-005	-090	-122	-050	-094	-163							
96	F-708	" Sports	-101	-120	-100	-111	-130	-133	-080	-133	-098	-031	-019	-051	-086	012	-004	-034	-069	-045	-045	-059	-064	-123	-085	-099	-228	-083
97	F-709	" Outdr Rec.	-044	-101	-060	-033	-059	-062	-035	-059	012	014	020	-006	025	008	020	-019	-025	022	-020	-079	-123	-120				
98	F-710	" Home-Mgmt.	-028	-002	032	-008	-008	-009	-010	-010	-004	013	-013	002	013	-013	-012	-003	-025	-120	-080	-052	-101	-068				
99	F-711	" Sales	053	-007	033	-009	007	000	-012	-005	035	051	013	028	023	031	009	024	036	048	017	027	004	-014	005	-042	-006	-002
100	F-712	" Computation	-056	-059	-007	-056	-054	-026	-024	-027	-023	-003	-056	-010	-014	007	-007	-008	-001	047	022	021						
101	F-713	" Office Work	-020	070	083	110	137	137	100	142	-004	-010	-015	-001	-005	009	-015	000	-061	-024	-009	001	-007	-052	036	085	022	021
102	F-714	" Mech-Tech	040	021	076	033	045	043	-002	025	063	011	025	063	119	087	114	011	083	040	-023	017	042					
103	F-715	" Skilled Trades	040	003	073	059	071	072	025	073	108	067	040	058	068	018	020	030	114	085	070	071	040	050	-023	017	042	
104	F-716	" Farming	-038	-112	-056	-065	-032	-051	-020	-044	041	050	074	009	040	043	065	016	089	079	067	013	087	024	-014	-076	020	
105	F-717	" Labor	072	034	110	071	088	088	034	087	141	074	071	108	103	008	044	078	128	116	106	121	019	134	107	010	068	099
106	C-001	Composite: I.Q.Comp.	455	573	751	803	696	898	307	954	537	186	107	252	479	023	001	142	544	292	303	305	-014	123	229	108	184	203
107	C-002	" Gen.Acad.Apt.	446	541	693	802	814	889	373	866	629	218	121	238	479	032	011	128	544	300	322	297	012	154	252	109	206	229
108	C-003	" Verbal	396	462	693	692	697	764	312	744	612	219	124	216	462	019	012	108	535	300	327	278	030	176	264	114	216	268
109	C-004	" Quantitative	420	496	580	813	922	959	591	977	572	179	101	185	464	062	019	105	452	213	246	225	005	102	194	107	162	203
110	C-005	" Technical	416	526	548	601	594	656	307	650	428	146	062	195	327	017	-011	129	368	207	203	230	033	084	173	125	178	181
111	C-006	" Sci. Apt.	476	596	727	817	797	886	431	878	566	203	105	245	432	038	006	147	487	272	287	292	009	119	223	123	195	217

Table V-3c (continued)

105

Column headers (diagonal labels, left to right): Tidiness (84), Culture (85), Leadership (86), Self-Confidence (87), Mature Personality (88), Phys Sci (89), Biol Sci & Med (90), Pub Serv (91), Lit-Ling (92), Soc Service (93), Artistic (94), Musical (95), Sports (96), Outdr Rec (97), Bus-Mgmt (98), Sales (99), Computation (100), Office Work (101), Mech-Tech (102), Skilled Trades (103), Farming (104), Labor (105), I.Q. Comp (106), Gen Acad Apt (107), Verbal (108), Quantitative (109), Technical (110), Sci Apt (111), MEAN, S.D., Code

84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	MEAN	S.D.	Code
127	159	031	103	141	003	-006	033	-026	-032	-050	016	-007	023	035	034	042	046	119	101	035	148	345	372	399	294	263	337	10.3665	.9078	
																												2.0000	.0000	
228	231	067	145	197	071	-003	079	-022	-028	-042	034	-034	049	071	086	072	043	192	151	064	172	407	443	476	314	359	402	11.4314	1.2537	R-101
146	265	103	158	255	-186	-215	-037	-220	-052	-222	-118	-134	-076	013	016	054	206	058	099	-063	129	771	807	829	698	731	813	10.6100	4.1691	R-102
121	251	105	148	229	-174	-210	-068	-246	-048	-243	-123	-141	-090	068	024	100	248	068	101	-058	150	717	738	787	656	632	742	10.9669	4.3673	R-103
150	284	146	178	243	-138	-193	-040	-208	-050	-205	-191	-121	-054	016	031	077	207	079	113	-032	151	647	672	676	592	608	683	5.4832	2.9076	R-104
138	242	099	147	243	-194	-199	-076	-228	-067	-210	-101	-136	-062	-007	009	023	200	065	103	-043	132	745	769	755	681	683	777	12.0035	5.1099	R-105
-115	221	134	153	266	-285	-242	-086	-224	-106	-199	-145	-154	-075	-023	-011	-020	198	012	066	-041	092	673	752	676	844	636	776	7.0446	4.2721	R-106
095	197	067	099	204	-216	-208	-031	-180	-031	-188	-119	-125	-093	025	-000	013	175	016	067	-077	078	607	634	602	604	819	728	6.8512	3.5326	R-107
092	208	061	112	195	-202	-239	-038	-188	-050	-220	-105	-145	-132	014	015	033	175	014	046	-103	071	606	621	605	558	735	688	5.1703	2.3602	R-108
102	193	081	133	179	-108	-120	012	-146	-051	-167	-039	-084	-038	016	024	027	138	075	083	-040	128	635	643	623	549	548	643	5.5013	2.0259	R-109
035	116	036	084	133	-146	-121	-021	-128	031	-138	-080	-108	-104	027	012	039	130	-000	052	-095	054	371	377	372	347	573	465	2.5402	1.6268	R-110
090	132	038	103	144	-114	-094	-008	-095	-004	-099	-062	-067	-057	-003	-008	-016	081	021	054	-043	061	355	383	375	370	658	487	5.1678	2.4916	R-111
067	146	032	118	142	-094	-111	021	-082	022	-117	-062	-096	-112	031	005	003	081	000	044	-115	036	463	476	464	417	713	575	6.4970	2.8765	R-112
090	181	044	120	171	-089	-122	019	-138	-029	-160	-077	-126	-116	026	030	011	120	047	059	-133	045	581	598	583	502	623	630	6.6115	2.6302	R-113
168	207	056	124	206	-041	-102	055	-054	-039	-115	-003	-062	-048	045	040	005	055	086	080	-048	079	554	573	569	466	557	586	11.5661	3.5143	R-114
094	161	099	131	170	-112	-138	-037	-141	-040	-113	-056	-096	-070	-003	-003	017	110	054	078	-051	094	530	555	543	507	535	579	5.0759	2.4669	R-115
130	230	084	138	213	-132	-169	-029	-201	-035	-237	-068	-118	-074	018	031	081	198	084	115	-046	156	674	686	700	567	603	688	5.8114	6.6219	R-131
054	152	051	118	158	-122	-121	-045	-157	-020	-123	-054	-098	-058	006	004	034	145	031	073	-045	101	544	560	552	496	497	570	3.8873	1.6547	R-132
179	229	066	144	218	-078	-166	029	-134	-042	-152	-041	-080	-024	046	035	053	119	116	121	-009	140	614	640	650	523	567	633	5.6543	2.0850	R-133
110	151	061	116	167	-088	-124	-003	-091	-026	-132	-054	-117	-080	017	013	020	070	050	071	-080	067	438	446	431	389	495	486	2.3469	1.2891	R-134
085	149	063	080	143	-109	-126	-027	-141	-030	-160	-067	-100	-061	-012	-016	042	124	026	041	-027	072	446	464	467	411	409	470	2.4631	1.2656	R-135
117	204	091	114	191	-107	-143	-046	-181	-063	-170	-064	-103	-029	-014	000	024	134	061	074	-020	103	533	554	561	473	476	551	1.5133	.9765	R-136
070	161	067	109	161	-118	-134	-033	-151	-017	-171	-066	-109	-087	026	016	091	202	054	089	-064	111	539	555	560	479	530	574	2.1227	1.3001	R-137
063	125	090	078	138	-113	-124	-039	-124	-051	-160	-095	-043	-017	000	031	119	007	038	-039	068	346	360	357	335	337	376	1.7332	1.1779	R-138
117	193	021	129	221	-123	-136	-039	-172	-051	-146	-060	-096	-021	-022	-025	-051	118	044	074	-026	111	584	598	592	531	516	605	3.4957	1.8972	R-139
148	204	068	178	181	-018	-076	008	-084	-038	-110	066	-071	-006	019	036	023	070	139	117	010	173	521	537	548	421	449	522	2.9223	.9579	R-140
163	163	068	110	176	-023	-065	-008	-087	-032	-083	-019	-055	006	-022	023	-027	-024	088	067	017	098	423	451	469	357	371	430	1.7032	.9166	R-141
073	196	099	131	199	-189	-187	-055	-241	-103	-192	-160	-129	-082	-002	021	030	154	022	052	-073	081	577	588	571	506	484	583	6.6343	3.2430	R-142
090	167	071	082	141	-091	-122	-006	-124	-024	-139	-079	-064	-036	019	013	-043	013	059	051	001	079	443	464	463	407	398	465	1.5128	.9207	R-143
110	152	073	106	134	-026	-043	045	-077	-030	-086	-020	-054	-005	035	017	037	081	092	080	-011	086	420	441	429	381	362	430	1.0501	.7374	R-144
009	031	003	056	051	-027	-060	012	017	007	-005	026	-052	-092	023	011	016	029	-014	013	-060	-012	116	117	111	109	162	119	0.6448	.2514	R-145
049	057	035	044	077	-019	-013	-007	-026	-026	-079	-015	-041	-053	-019	-008	-039	-038	-010	-007	-029	-006	051	058	060	056	090	071	.9704	.8994	R-146
102	176	072	136	172	-077	-144	022	-101	-007	-116	-027	-128	-080	040	032	058	131	070	095	-064	103	557	573	561	502	571	601	4.0276	1.9043	R-147
143	157	063	122	155	-015	-055	007	-101	-005	-112	-018	-070	-022	011	026	047	049	096	084	-010	103	425	442	447	340	345	416	1.2082	.6954	R-148
059	109	064	095	118	-067	-079	-013	-066	-021	-075	-014	-091	-064	024	035	023	089	080	089	005	112	376	406	404	376	347	406	1.9394	1.0243	R-149
124	216	089	136	194	-075	-126	-012	-198	-050	-194	-088	-108	-037	005	021	166	180	116	120	-015	152	632	652	666	542	524	636	4.0874	1.7846	R-150
088	176	071	087	146	-051	-128	003	-118	-043	-129	-027	-051	-016	017	-000	080	077	098	016	105	452	461	475	395	389	462		1.2821	1.0232	R-151
116	209	087	135	206	-131	-177	-031	-165	-058	-170	-074	-123	-068	003	-021	-031	147	069	090	-037	129	607	632	626	550	557	636	4.2224	1.7316	R-152
162	241	081	155	233	-108	-162	-001	-178	-045	-199	-050	-102	-045	024	031	038	138	095	115	-030	152	712	735	759	603	616	720	5.4812	2.2430	R-162
163	276	103	169	266	-171	-211	-026	-221	-058	-230	-101	-132	-070	018	023	052	196	076	113	-055	147	807	841	865	715	743	839	16.0492	5.9632	R-172
160	288	115	183	285	-208	-232	-037	-231	-058	-239	-127	-166	-103	017	020	040	218	068	110	-083	137	835	873	862	792	884	919	113.5709	33.3859	R-190
164	282	109	189	278	-155	-207	-026	-229	-072	-232	-092	-155	-080	016	024	067	198	099	128	-054	165	818	844	845	722	747	850	62.0500	19.2760	R-192
166	293	119	190	290	-194	-229	-034	-236	-063	-243	-117	-166	-091	017	022	051	216	081	119	-074	151	850	885	877	786	857	917	175.6200	51.3880	R-100
089	122	059	084	131	-072	-090	-016	-091	-051	-092	-027	-057	-030	-024	013	-007	090	043	053	-001	061	378	414	403	339	312	386	9.3607	3.1084	R-211
108	171	077	114	181	-116	-132	-026	-152	-061	-173	-077	-086	-026	-002	008	-008	088	043	060	-016	084	542	588	576	519	433	556	11.7528	5.5819	R-212
155	220	127	174	215	-064	-121	002	-157	-051	-054	-086	-014	034	017	046	066	110	116	103	156	644	673	672	536	492	634		5.4261	2.0261	R-220
188	221	100	142	246	-077	-130	-008	-153	-100	-130	-076	-084	006	015	049	012	058	097	089	047	113	578	694	735	544	413	572	9.3601	2.9614	R-231
151	169	023	124	136	025	-035	061	-046	-022	-071	025	-041	021	060	064	042	151	136	033	154	515	645	713	453	404	512		29.2943	4.4935	R-232
176	230	089	160	239	-103	-124	011	-167	-075	-185	-081	-102	-010	016	047	-051	091	104	100	-000	138	729	839	857	689	570	738	17.4050	4.7261	R-233
138	186	057	137	185	-057	-071	030	-135	-060	-141	-056	-080	009	032	059	055	016	148	106	007	133	615	730	780	556	482	616	16.4907	3.4433	R-234
116	159	032	094	137	-036	-095	024	-117	-055	-131	-027	-057	004	011	039	049	076	099	091	-001	118	572	647	680	473	404	545	8.4486	2.3449	R-235
197	244	077	170	239	-062	-116	032	-152	-076	-165	-052	-091	008	037	066	036	091	143	133	022	167	758	899	952	688	578	754	81.1400	14.3813	R-230
122	216	110	134	230	-191	-176	-053	-199	-117	-180	-105	-127	-045	-008	016	-021	143	044	064	-030	098	710	734	667	700	539	612	10.1460	5.5578	R-240
145	247	076	157	245	-165	-205	-021	-201	-081	-230	-103	-136	-072	014	031	043	164	100	107	055	146	943	891	816	700	677	879	27.9186	10.8015	R-250
097	173	067	133	185	-145	-154	-026	-163	-044	-201	-088	-119	-096	-009	010	061	119	025	047	-078	083	651	669	593	550	604	718	7.6433	3.7407	R-260
046	117	038	109	121	-156	-129	-025	-164	020	-165	-044	-132	-107	037	041	-081	016	047	112	066	591	570	505	517	723	672		8.1641	3.5152	R-270
062	080	042	096	102	-085	-052	027	-056	001	-116	-043	-101	-044	028	053	-281	020	040	041	-038	072	455	446	396	400	418	476	11.2012	5.6799	R-261
036	051	041	081	107	-070	-110	-064	-007	-014	-206	-046	-120	-101	-002	-017	-050	070	-017	032	-112	034	573	541	462	496	526	596	7.0237	2.9933	R-282
080	144	052	093	141	-115	-111	024	-092	-020	-186	-037	-100	-060	032	031	-007	083	076	073	-056	110	791	693	619	580	548	727	8.3634	3.1454	R-290
103	192	088	125	217	-182	-146	-031	-171	-074	-171	-060	-111	-053	-008	-000	-056	110	033	059	-065	071	803	802	692	813	601	817	4.4557	3.4867	R-311
115	203	106	136	237	-227	-161	-055	-182	-108	-172	-098	-130	-059	-038	007	-154	137	043	071	-032	088	696	814	697	922	659	797	9.6837	4.2439	R-312
121	218	108	144	265	-221	-181	-049	-195	-107	-189	-089	-133	-062	-009	060	-060	137	043	072	-073	088	818	889	764	959	656	866	17.0386	7.0326	R-320
035	093	065	072	128	-157	-121	-046	-098	-056	-102	-067	-080	-035	-010	-012	-026	100	002	025	-020	034	327	373	322	591	317	431	5.4858	1.7552	R-333
114	214	111	143	265	-231	-184	-051	-194	-104	-187	-088	-133	-040	-011	-005	-060	142	043	073	-044	087	795	866	744	977	650	878	19.5900	7.9411	R-340
228	230	107	179	282	-066	-028	-002	-093	-095	-084	-028	-098	022	-004	-035	-084	-000	128	108	054	141	537	629	613	572	428	566	36.9003	10.5543	R-410
132	117	101	103	128	002	-028	017	-003	-035	-008	042	-031	014	013	051	-024	-010	078	067	050	074	206	218	209	179	146	203	11.9649	7.5865	R-420
135	123	130	134	145	-023	-055	-027	-030	-065	-018	-006	-019	022	-013	051	-035	-015	000	040	074	071	127	121	124	101	062	145	37.9729	14.7322	R-430
120	101	076	107	105	004	-031	010	-015	-037	-088	015	-051	-012	032	028	-007	-001	085	058	007	108	252	238	216	185	195	245	22.8134	7.0733	R-440
203	201	100	165	262	-074	-074	-027	-053	-035	-067	-034	-086	012	-018	003	-070	005	068	084	103	391	479	462	464	327	432		40.1711	16.3422	A-410
089	080	120	064	088	-020	-015	-003	010	-006	014	022	-012	014	002	031	-027	009	011	018	043	008	023	032	019	062	017	038	15.0569	9.6631	A-420
112	091	132	118	123	-023	-036	-028	-013	-040	006	007	-004	002	-012	017	-033	015	020	065	044	011	011	012	019	-01	006		42.0952	15.2565	A-430
111	084	093	095	094	006	-025	007	002	001	-058	016	-034	-000	007	024	-003	000	063	039	016	078	142	128	108	105	129	147	24.3702	7.2306	A-440
154	161	047	113	175	-023	-028	029	-013	-047	-076	-035	-069	025	017	016	-035	060	114	114	019	114	489	544	535	452	368	487	27.0879	21.6602	F-410
116	102	038	096	111	-023	-028	029	-013	-047	-026	043	-035	008	018	048	-010	-024	109	085	036	107	292	301	300	213	267	272	8.8650	9.6465	F-420
136	134	079	120	142	-020	-074	012	-055	-054	-066	001	-045	020	-012	017	-024	-069	088	070	068	074	303	322	327	246	203	287	25.5802	20.7461	F-430
112	104	057	104	097	-034	-034	011	-027	-048	-100	010	-059	-016	-003	007	-007	001	095	076	071	121	305	297	278	225	230	292	21.1212	11.6958	F-440
151	164	156	121	161	-002	-024	-026	-052	-040	-023	-005	-046	-025	-025	004	-07	-014	024	009	013	019	-014	012	030	005	031	030	57.6566	22.7088	A-500
421	461	367	316	408	056	-052	-047	088	-163	-047	-009	-123	022	-054	-058	052	148	140	087	134	123	154	176	102	084	119		6.9218	2.9535	R-601
540	635	349	316	612	-046	-142	-072	-203	-207	-148	-122	-085	-020	-080	005	-001	036	083	050	024	107	229	252	264	194	173	223	4.8770	2.3410	R-602
089	121	264	130	121	-065	-063	-063	139	-029	-099	-099	-079	-052	-062	-471	005	-023	-041	010			108	109	115	107	125	123	1.9200	1.6470	R-603
415	465	398	527	491	-090	-175	-062	-143	-145	-108	-094	-228	-123	-071	-006	-22	022	024	017	-076	068	184	206	216	162	178	195	3.5606	2.1324	R-604
540	581	341	420	609	-087	-143	-073	-159	-174	-118	-103	-083	-020	-068	-22	-58	021	016	042	020	099	203	229	228	203	181	217	4.5107	2.5107	R-605
600	600	328	268	623	014	-069	-025	-085	-148	-059	-054	-016	060	-050	008	-53	-035	133	072	098	122	137	172	194	120	181	134	5.8437	2.7214	R-606
328	421	340	537	630	-095	-171	-098	-233	-206	-178	-152	-137	-066	-076	003	-18	078	080	050	025	138	239	267	280	225	215	251	5.4845	2.7857	R-607
268	337	340	476	388	-161	-188	-183	-231	-194	-137	-142	-137	-066	-168	-073	-76	045	-037	-052	-010	012	083	101	098	122	064	048	1.2793	1.3377	R-608
623	630	340	388		-064	-176	-092	-151	-114	-098	-034	-115	-035	-071	012	-008	001	053	052	013	116	153	178	184	153	147	167	4.9334	2.4073	R-609
623	630	476	388		-167	-219	-138	-242	-234	-135	-153	-111	-036	-115	-021	-112	015	028	018	-003	059	243	281	270	278	217	269	10.7871	5.1214	R-610
014	-095	-161	-064	-167	712	580	385	465	422	492	492	429	439	390	488	053	026	050	043	350		181	-178	-120	-267	-219	-234	60.9404	11.3822	F-701
-069	-191	-188	-126	-219	391	494	433	377	352	402	352	304	230	234	-079	409	315	297	183			-192	-194	-172	-211	-212	-223	26.0454	7.5040	F-702
-025	-098	-183	-089	-138	492	371	587	472	464	439	413	300	632	490	393	147	454	496	288	294		-014	-016	001	-065	-004	-030	41.4723	11.6943	F-703
-085	-235	-231	-151	-242	586	474	587	539	662	602	512	383	609	475	042	143	440	522	369	307		-215	-219	-226	-201	-148	-221	49.0561	13.1946	F-704
-148	-203	-194	-114	-234	383	451	412	539	367	358	197	509	382	391	287	303	400	247	298			-076	-094	-072	-110	-005	-071	32.1849	9.2346	F-705
-059	-126	-137	-098	-135	465	377	404	662	347	530	427	364	447	362	441	090	371	456	360	237		-235	-225	-215	-201	-218	-245	21.6609	6.5660	F-706
-054	-192	-152	-094	-153	422	352	339	602	367	510	355	305	345	262	231	081	326	347	292	213		-088	-096	-065	-112	-110	-142	16.1300	5.4179	F-707
-016	-107	-137	-115	-111	492	401	312	358	427	355	563	436	321	283	115	574	447	447	330			-139	-139	-122	-148	-158	-162	25.4469	7.0624	F-708
060	-026	-066	-035	-036	423	352	309	383	197	364	305	563	329	291	215	084	482	424	645	357		-075	-052	-031	-069	-140	-103	10.6633	3.2453	F-709
-050	-070	-108	012	-021	439	290	490	495	382	369	262	321	291	693	526	394	520	616	346	456		016	015	030	004	017	016	47.4021	9.8780	F-710
008	003	-073	012	-021	390	236	490	495	382	369	262	321	291	693	526	394	520	616	346	478		026	035	054	004	017	016	21.8775	4.9524	F-711
-053	-126	-076	-008	-021	488	236	393	369	241	283	215	576	526	600	405	502	261	400			013	009	057	054	011	-007		17.2514	5.7251	F-712
-035	078	045	051	015	053	-079	147	143	287	090	081	135	084	121	394	600	282	420	144	375		150	154	161	165	174	177	20.9138	5.7994	F-713
133	082	-037	053	028	083	315	454	440	303	371	324	474	482	523	520	502	420	813	526	686		081	097	126	034	018	053	63.8111	9.0412	F-714
072	050	-052	052	018	505	315	496	522	409	456	347	447	424	661	526	502	420	813	526	716		096	114	136	072	072	089	70.1966	9.4612	F-715
098	105	-010	085	045	286	184	369	364	247	360	722	493	465	354	456	478	400	375	686	493		-067	-043	-016	-048	-117	-088	25.3662	6.1864	F-716
122	138	012	116	059	350	183	294	307	298	237	213	330	357	456	478	400	375	686	716	493		138	151	177	092	087	121	41.2690	8.9537	F-717
137	239	083	158	243	-181	-120	-016	-215	-070	-235	-088	-139	-074	016	030	013	100	098	006	-012	138		940	846	796	718	947	155.1227	54.2087	C-001
172	267	101	178	281	-178	-194	-016	-219	-094	-225	-096	-139	-052	015	035	009	154	097	114	-036	177	940	949	763	696	857		474.6338	119.6943	C-002
194	280	098	184	278	-120	-172	001	-206	-072	-215	-085	-122	-031	050	054	057	161	126	136	-012	177	846	949	675	675	864		108.2570	22.2850	C-003
120	251	122	153	270	-262	-211	-063	-211	-110	-201	-112	-146	-069	014	044	072	-054	092			796	880	763	675	864			84.9852	35.5112	C-004
101	215	064	147	217	-219	-212	-009	-168	-005	-218	-110	-158	-140	032	017	011	174	018	-127	087		796	880	696	675	864		34.9406	11.7898	C-005
134	251	078	167	269	-234	-223	-030	-221	-071	-245	-112	-162	-103	011	016	-007	177	053	089	-088	121	947	951	857	894	864		367.8597	121.6538	C-006

Table V-4

Intercorrelations Among 111 Project Talent Variables for 15-Year-Olds
(Population from Tables V-2c and V-3c)
N=7648

Var*	Var	Code	Description	1 Grade	2 Sex	3 Screening	4 Vocab I	5 Literature	6 Music	7 Soc.Stud.	8 Math	9 Phys.Sci	10 Bio.Sci	11 Sci Attitude	12 Aero & Space	13 Elec & Electron	14 Mechanical	15 Farming	16 Home Ec	17 Sports	18 Art	19 Law	20 Health	21 Engineering	22 Architecture	23 Journalism	24 Foreign Travel	25 Military
	1		Grade		077	358	344	355	289	325	289	217	305	318	145	157	203	262	287	247	315	264	356	215	200	242	234	150
	2		Sex (1=M, 2=F)	077		129	-130	-012	111	-158	-117	-245	-149	021	-408	-417	-518	-127	514	-367	054	-130	124	-211	-002	012	-145	-196
1	3	R-101	Info I: Screening	358	129		433	404	385	458	306	332	353	413	205	242	296	408	423	330	397	330	451	313	254	294	270	194
2	4	R-102	" Vocab I	344	-130	433		726	639	749	678	683	656	607	551	533	566	604	391	583	663	597	616	462	552	589	504	452
3	5	R-103	" Literature	355	-012	404	726		663	721	651	575	585	548	460	396	392	478	373	502	677	594	576	422	482	546	583	436
4	6	R-104	" Music	289	111	385	639	663		617	573	497	493	474	362	328	305	415	442	434	618	462	542	367	429	504	499	351
5	7	R-105	" Soc.Studies	325	-158	458	749	721	617		653	670	631	565	519	492	517	560	345	601	635	586	583	480	457	533	610	456
6	8	R-106	" Math	289	-117	306	678	651	573	653		633	558	505	476	491	435	442	294	512	538	505	497	424	422	467	496	394
7	9	R-107	" Phys. Sci	217	-245	332	683	575	497	670	633		633	489	577	642	561	328	247	511	515	500	489	477	367	420	513	391
8	10	R-108	" Bio. Sci	305	-149	353	656	585	493	631	558	633		490	483	483	517	551	318	466	511	472	528	455	374	417	482	358
9	11	R-109	" Sci Attitude	318	021	413	607	546	474	565	505	489	490		343	345	389	466	393	418	516	462	505	372	346	420	423	288
10	12	R-110	" Aero & Space	145	-408	205	551	460	362	519	476	577	483	343		612	577	382	046	484	394	440	324	422	300	346	447	392
11	13	R-111	" Elec & Electron	157	-417	242	533	396	328	492	491	642	483	345	612		647	412	065	445	346	412	321	452	261	305	392	320
12	14	R-112	" Mechanical	203	-518	296	566	392	305	517	435	561	517	389	577	647		550	079	533	346	422	337	495	263	310	398	341
13	15	R-113	" Farming	262	-127	408	604	478	415	560	442	528	551	466	382	412	550		356	454	448	440	472	435	328	373	401	293
14	16	R-114	" Home Ec	287	514	423	391	373	442	345	294	247	318	343	046	065	079	356		114	405	264	475	209	272	321	230	104
15	17	R-115	" Sports	247	-367	330	583	502	434	601	512	511	466	418	484	445	533	454	114		440	472	392	418	326	415	455	404
	18	R-131	Info II: Art	315	054	397	663	677	618	635	538	515	511	516	394	346	346	448	405	440		529	581	426	451	524	556	380
	19	R-132	" Law	264	-130	330	597	549	462	586	505	500	472	402	440	412	422	440	264	472	529		483	422	372	455	472	383
	20	R-133	" Health	356	124	451	616	576	542	583	497	489	528	505	324	321	337	472	475	392	581	483		406	387	472	445	305
	21	R-134	" Engineering	215	-211	313	519	422	367	480	424	477	455	372	422	452	495	435	209	418	426	542	406		306	355	379	371
	22	R-135	" Architecture	200	-002	254	462	482	429	457	422	367	374	346	300	261	263	328	272	326	451	372	387	306		350	393	311
	23	R-136	" Journalism	242	012	294	552	546	504	533	467	420	346	305	310	373	321	415	524	455	472	355	350			432	332	
	24	R-137	" Foreign Travel	234	-145	270	589	583	499	610	496	513	482	423	447	392	398	401	230	455	556	472	445	379	393	432		389
	25	R-138	" Military	150	-196	194	452	436	351	456	394	391	358	268	392	320	341	293	104	414	380	383	305	321	311	332	389	
	26	R-139	" Acct,Bus,Sales	285	-012	347	586	558	511	574	509	462	448	466	369	349	369	416	351	418	546	508	502	383	375	479	461	156
	27	R-140	" Pract.Knowl.	325	079	483	523	488	454	504	402	389	409	463	290	290	333	387	406	383	527	452	533	393	327	413	405	276
	28	R-141	" Clerical	314	205	331	391	390	384	366	340	264	297	326	143	156	166	292	406	230	408	312	427	251	263	348	280	203
	29	R-142	" Bible	240	038	330	555	570	472	566	480	451	464	456	324	268	291	423	341	360	510	468	479	345	371	419	424	348
	30	R-143	" Colors	158	247	210	314	329	363	270	282	220	244	265	079	079	066	213	357	124	338	240	324	167	245	260	242	129
	31	R-144	" Etiquette	200	179	259	323	305	318	297	303	240	237	317	102	113	111	249	337	189	319	239	339	191	211	253	232	157
	32	R-145	" Hunting	062	-419	102	235	120	039	218	153	261	268	142	311	330	437	304	-093	286	100	202	107	275	105	086	181	182
	33	R-146	" Fishing	070	-281	138	225	158	104	200	175	240	234	144	289	293	344	241	-013	258	147	207	147	255	131	113	159	168
	34	R-147	" Outdr Act(Other)	270	-127	387	605	522	463	570	530	518	477	433	432	407	495	320	094	531	484	513	472	351	413	459	337	
	35	R-148	" Photography	226	044	310	431	391	367	403	347	317	320	367	251	270	267	316	297	289	419	344	422	313	268	337	320	214
	36	R-149	" Games	209	-168	290	450	430	370	448	401	353	348	340	346	348	277	169	424	397	377	364	348	279	315	352	296	
	37	R-150	" Theater,ballet	311	162	380	605	616	595	549	490	406	424	472	302	248	252	383	430	384	625	492	550	344	392	508	477	331
	38	R-151	" Foods	173	112	192	414	433	444	358	354	273	276	294	192	170	157	230	327	241	423	300	360	222	279	331	336	235
	39	R-152	" Miscellaneous	291	-076	384	618	595	535	609	540	532	495	477	424	406	402	437	325	464	577	500	537	420	410	469	496	324
	40	R-162	" Vocabulary II	341	065	424	705	655	611	661	576	542	551	554	400	375	396	500	468	446	686	589	665	466	432	617	531	375
16	41	R-172	Vocab Tot. (I & II)	369	-065	462	963	754	676	772	690	681	665	633	535	513	544	610	450	582	722	639	681	534	486	618	611	456
	42	R-190	Info I Total	376	-181	520	886	807	714	867	788	811	759	615	653	671	685	645	450	687	700	649	661	583	505	587	643	491
	43	R-192	Info II Total	386	-033	502	819	783	700	789	669	661	650	639	526	491	521	602	474	595	808	716	751	601	572	649	676	534
	44	R-100	Info Total (I & II)	389	-134	528	886	820	729	863	774	780	744	680	626	626	646	681	471	673	756	690	710	604	542	624	672	519
17	45	R-211	Memory for Sentences	181	125	244	284	249	224	249	228	221	228	261	111	107	128	237	264	152	259	228	282	164	168	196	175	109
18	46	R-212	Memory for Words	237	151	274	433	442	406	408	419	340	339	351	157	149	141	299	328	257	403	325	399	228	283	310	310	211
19	47	R-220	Disguised Words	308	096	362	568	553	539	493	490	399	465	455	272	246	272	360	378	353	542	403	500	319	357	431	429	278
20	48	R-231	English:Spelling	319	225	399	485	485	467	456	452	334	349	379	149	150	143	329	347	305	453	335	484	254	320	342	342	223
21	49	R-232	" Capitalization	321	157	437	425	408	370	415	346	322	338	397	179	196	215	344	371	287	404	316	427	263	255	331	290	176
22	50	R-233	" Punctuation	349	195	414	590	567	536	561	570	455	456	510	249	241	233	419	458	343	529	476	536	322	362	417	404	261
23	51	R-234	" Usage	337	164	420	539	516	465	498	465	403	414	468	241	243	252	403	408	323	485	399	497	306	326	394	377	241
24	52	R-235	" Eff. Exp.	304	161	361	471	456	429	442	403	336	354	457	215	188	205	342	385	293	442	371	446	265	287	363	333	210
25	53	R-230	" Total	406	221	509	624	602	561	591	556	463	476	549	257	258	264	454	501	387	574	458	593	354	385	468	433	276
26	54	R-240	Word Functions	259	145	284	547	543	497	511	598	431	436	459	242	230	204	305	375	334	470	407	470	293	361	403	392	278
27	55	R-250	Reading Comprehension	359	071	455	749	720	651	717	634	580	596	621	421	379	394	536	462	486	675	569	636	447	450	556	553	396
28	56	R-260	Creativity	247	-062	311	594	532	489	525	511	502	479	462	421	426	441	456	337	410	520	456	470	419	367	418	443	328
29	57	R-270	Mechanical Reasoning	198	-400	223	543	401	337	488	493	565	451	397	549	566	604	444	101	467	373	404	323	445	276	291	399	317
30	58	R-281	Vis. in 2 Dimens	190	-153	215	371	300	272	339	352	343	302	306	277	288	338	242	161	316	304	271	251	292	217	223	270	196
31	59	R-282	Vis. in 3 Dimens	194	-118	191	441	377	352	412	452	439	387	353	381	376	341	226	302	368	330	308	339	269	268	312	217	
32	60	R-290	Abstract Reasoning	297	-020	313	526	483	445	502	505	459	433	459	325	318	325	376	318	375	459	379	432	339	308	354	375	249
33	61	R-311	Math I	284	-040	328	636	561	493	604	628	541	509	533	385	397	407	469	350	463	497	488	490	402	373	442	437	333
34	62	R-312	Math II	294	-030	324	619	585	518	605	732	555	503	476	375	380	361	429	333	454	503	475	499	383	374	440	439	346
35	63	R-320	Math I & II	317	-042	356	684	627	554	640	749	600	552	560	415	424	417	488	372	500	547	525	540	428	408	481	479	371
36	64	R-333	Math III	193	-069	132	323	339	278	303	474	308	281	296	244	247	207	168	113	266	276	265	242	205	220	216	244	207
37	65	R-340	Math Total(I+II+III)	322	-057	341	670	624	545	644	760	595	549	547	416	427	411	473	351	496	540	519	527	420	405	469	473	367
42	66	R-410	Arith Computation	305	111	449	435	403	387	445	437	335	315	392	153	188	201	355	354	360	386	319	433	286	274	331	289	203
43	67	R-420	Table Reading	185	062	190	159	176	172	146	159	102	165	135	055	061	061	090	149	136	180	120	167	112	110	123	134	083
44	68	R-430	Clerical Checking	166	125	147	076	118	121	065	095	011	017	067	-030	-020	-045	-021	117	046	111	049	100	035	075	078	064	032
45	69	R-440	Object Inspection	177	090	194	155	174	186	138	137	108	120	146	065	054	070	032	180	117	198	116	117	120	121	119	128	076
46	70	A-410	Arith Computation	198	055	278	273	261	252	281	312	224	182	237	084	121	117	223	214	249	243	201	266	183	188	214	188	148
47	71	A-420	Table Reading	021	-041	-038	-033	-019	-001	-044	014	-035	-048	-048	-027	-025	-024	-056	-036	004	-019	-035	-050	-023	002	-027	004	014
48	72	A-430	Clerical Checking	088	055	050	-024	021	013	-029	016	-056	-059	-023	-070	-057	-083	-089	035	-021	018	-022	001	-019	015	002	-008	-015
49	73	A-440	Object Inspection	110	058	111	062	088	106	051	066	044	047	049	017	016	022	036	035	062	110	043	090	063	070	050	063	043
38	74	F-410	Arith Computation	263	121	404	387	349	332	394	394	282	301	361	152	163	192	317	326	289	344	283	392	250	224	286	249	194
39	75	F-420	Table Reading	233	124	298	251	260	237	243	204	176	192	233	102	109	108	174	240	183	265	200	277	178	149	196	180	100
40	76	F-430	Clerical Checking	264	165	293	259	276	258	240	224	149	174	232	070	070	059	133	245	169	264	181	268	139	171	209	193	121
41	77	F-440	Object Inspection	203	099	231	210	217	224	189	176	152	166	204	094	083	105	133	211	145	240	158	227	150	144	155	162	090
50	78	A-500	Preferences	025	-139	132	012	011	008	004	-022	-006	-004	-001	-017	-005	030	041	009	057	028	002	026	039	024	011	008	033
51	79	R-601	SAI: Sociability	171	186	262	115	118	167	098	070	014	057	131	-031	-028	-006	097	219	122	149	065	180	080	119	065		044
52	80	R-602	" Soc.Sensitivity	171	245	248	177	207	236	158	147	087	123	180	-031	-000	-031	114	283	061	228	105	234	079	121	180	113	075
53	81	R-603	" Impulsiveness	044	020	092	099	110	101	073	070	049	060	059	042	031	036	055	068	075	099	072	065	064	076	072	066	
54	82	R-604	" Vigor	143	024	211	208	182	197	186	182	138	156	168	094	084	132	190	165	230	183	129	209	175	103	156	126	113
55	83	R-605	" Calmness	149	081	236	226	204	222	203	208	161	166	196	094	092	125	109	176	225	157	221	159	234	162	135	187	134
56	84	R-606	" Tidiness	145	191	244	144	144	194	129	122	072	081	123	-004	022	-008	049	244	065	176	075	216	091	115	136	076	058
57	85	R-607	" Culture	150	252	241	179	210	268	161	164	097	124	159	-007	-021	122	286	056	222	112	226	089	149	176	098	069	
58	86	R-608	" Leadership	003	037	043	062	083	125	062	104	033	025	046	012	-010	-025	016	063	085	081	041	056	031	055	086	043	079
59	87	R-609	" Self-Confidence	130	108	208	198	178	191	182	187	141	146	165	119	131	127	147	157	148	179	150	185	146	121	143	132	114
60	88	R-610	" Mature Personality	143	079	222	231	223	238	223	249	176	171	100	120	097	161	210	148	218	162	231	161	156	187	142	136	
	89	F-701	Int Inv: Phys Sci	015	-409	059	-29	-164	-099	-244	-324	-332	-254	-104	-355	-363	-330	-140	172	-279	-113	-193	-053	-206	-114	-116	-102	-210
	90	F-702	" Biol Sci & Med	-042	118	-006	-188	-185	-169	-184	-235	-217	-223	-161	-169	-143	-118	-094	-029	-156	-154	-192	-139	-138	-116	-143	-138	-145
	91	F-703	" Pub Serv.	037	238	073	-048	-064	-017	-099	-094	-046	-044	-014	-087	-067	-070	009	141	-137	-018	-072	044	-038	-053	060	-102	
	92	F-704	" Lit-Ling.	-007	-170	-001	-105	-189	-189	-123	-143	-058	-080	-083	013	065	113	-023	-118	-031	-159	-087	-031	-006	-114	-149	-077	-080
	93	F-705	" Soc.Serv.	-017	-444	-030	079	-002	-070	064	007	128	081	009	143	236	313	093	-236	155	-019	074	-021	118	-006	-033	085	173
	94	F-706	" Artistic	-019	-202	-016	-086	-157	-169	-078	-099	-054	-100	-079	017	051	083	-036	-169	041	-175	-037	-109	-030	-116	-111	-075	-025
	95	F-707	" Musical	029	-191	063	004	-053	-171	017	-048	020	002	021	064	083	111	-048	-080	102	-039	032	-014	039	-032	-026	022	017
	96	F-708	" Sports	-011	354	-028	-141	-106	-054	-171	-149	-168	-149	-071	-211	-151	-231	-146	137	-357	-078	-130	-035	-165	-059	-070	-131	-164
	97	F-709	" Outdr Rec.	029	-434	032	105	-039	044	-113	-070	-166	-163	-027	-247	-220	-326	-181	211	-229	-009	-099	-030	-180	-036	004	-107	-121
	98	F-710	" Bus. Mgmt.	037	164	069	022	012	012	-015	-022	015	019	040	-018	031	108	-080	029	-012	063	-007	-013	-014	012	-048		
	99	F-711	" Sales	047	171	090	031	026	046	006	-010	003	031	054	-000	-007	-015	039	117	-064	044	-002	063	006	005	003	016	-027
	100	F-712	" Computation	051	-413	040	254	210	115	247	205	267	227	148	312	289	332	178	-174	276	156	193	078	183	091	100	113	239
	101	F-713	" Office Work	038	038	052	035	-004	-077	-021	022	-003	-031	-000	042	035	-064	052	002	033	101	013	-002	013	001	008	008	
	102	F-714	" Mech-Tech	129	616	180	013	118	172	009	006	-095	-041	060	100	-212	-261	-332	-049	362	-145	145	-009	178	-097	052	093	067
	103	F-715	" Skilled Trades	145	276	194	154	183	196	141	115	085	088	164	029	007	-048	065	227	026	194	100	209	052	091	129	122	044
	104	F-716	" Farming	069	-329	099	-011	047	088	-015	-045	-055	-044	-009	-106	-217	-310	-157	-102	064	-029	075	-092	052	062	017	-047	
	105	F-717	" Labor	189	221	233	199	228	233	191	161	126	137	203	067	058	005	080	226	081	242	151	205	090	127	108	161	087
	106	C-001	Composite: I.Q.Comp.	375	020	449	767	718	636	733	691	621	615	642	447	436	553	460	520	668	578	634	471	456	551	559	396	
	107	C-002	" Gen.Acad.Apt.	408	073	494	791	740	666	746	757	635	621	654	447	432	423	426	563	498	529	683	590	668	475	474	570	560	400
	108	C-003	" Verbal	432	127	534	801	785	673	729	671	593	599	632	397	380	391	530	520	503	697	574	679	453	473	574	557	384
	109	C-004	" Quantitative	327	-074	345	699	659	578	674	858	629	571	558	449	459	431	479	349	521	563	536	542	437	427	488	493	
	110	C-005	" Technical	251	-455	341	729	571	474	682	639	833	722	508	760	832	826	596	172	603	508	545	474	572	376	426	540	434
**	111	C-006	" Sci. Apt.	358	-180	432	826	732	637	782	799	777	716	644	622	641	638	617	378	614	660	625	624	560	475	553	601	459

Table V-4 (continued)　　　　　107

	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
	Acct,Bus.Sales	Pract. Knowl.	Clerical	Bible	Colors	Etiquette	Hunting	Fishing	Outdr Act (Other)	Photography	Games	Theater, Ballet	Foods		Miscellaneous	Vocabulary II	Voc.Tot. (I & II)	Info I Total	Info II Total	Info Tot (I & II)	Mem. for Sentences	Mem. for Words	Disguised Words	Spelling	Capitalization	Punctuation	Usage	Err. Exp.	Exp. Total	Word Functions	Reading Comp.	Creativity	Mech. Reasoning / Code

26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	Code
285	325	314	240	158	200	062	070	270	226	209	311	173	291	341	369	376	386	389	181	237	308	319	321	349	337	304	406	259	359	247	198	
-012	079	205	638	247	179	-419	-281	-127	044	-188	162	112	-076	065	-065	-181	-033	-134	125	151	096	225	157	195	164	161	221	145	071	-062	-400	
347	483	331	330	210	259	102	138	387	310	290	380	192	384	424	462	520	502	528	284	274	362	399	437	414	420	361	509	284	455	311	223	R-101
586	523	391	555	314	323	235	225	605	431	450	605	414	618	705	963	886	819	886	284	433	568	485	425	590	539	471	624	547	749	594	543	R-102
558	488	380	570	329	305	120	158	522	391	430	616	433	595	655	754	807	783	826	249	442	553	485	408	567	516	456	602	543	720	532	401	R-103
511	454	384	472	363	318	039	104	463	367	370	595	444	535	611	676	714	700	729	224	406	539	467	370	536	465	429	561	497	631	489	337	R-104
574	504	366	566	270	297	218	200	570	403	448	549	358	609	661	772	867	789	863	249	408	493	456	415	561	498	442	591	511	717	525	488	R-105
509	402	340	480	282	303	153	175	506	347	435	490	354	540	576	690	788	689	774	228	419	490	452	346	570	465	403	556	496	634	511	493	R-106
462	389	264	451	220	240	261	240	530	317	401	406	273	532	542	681	811	661	780	221	340	399	334	322	455	403	336	463	431	580	502	565	R-107
448	409	297	464	244	237	268	234	518	320	353	424	276	495	551	665	759	659	744	228	339	405	349	338	456	414	354	476	436	596	479	491	R-108
466	463	326	456	317	142	144	477	367	348	472	294	477	554		633	675	639	686	261	351	455	379	397	510	468	457	549	459	621	462	397	R-109
369	290	143	324	079	102	311	289	433	251	340	302	192	424	400	535	653	526	626	111	157	272	149	177	249	241	215	257	242	421	421	549	R-110
349	290	156	268	079	113	330	293	432	270	346	248	170	400	375	513	671	491	626	107	149	246	150	196	247	243	188	258	230	379	426	566	R-111
369	333	166	291	060	111	437	344	480	267	348	252	157	402	396	544	685	521	646	128	141	272	143	215	233	252	205	264	204	394	441	604	R-112
416	387	292	423	213	249	304	241	495	316	297	383	230	437	500	610	695	602	681	237	299	360	329	344	410	403	342	434	365	536	456	444	R-113
351	406	406	341	357	337	-093	-013	320	297	169	430	327	325	468	450	450	474	471	264	328	378	397	373	458	408	385	501	375	462	337	101	R-114
418	383	230	360	124	189	286	258	494	289	424	384	241	464	466	382	687	595	673	152	257	351	305	287	343	323	243	387	334	486	410	467	R-115
546	527	408	510	338	319	100	147	531	419	347	625	423	577	686	722	700	808	756	259	403	542	453	404	529	485	442	574	470	675	520	373	R-131
508	452	312	468	240	239	202	207	484	344	377	492	300	500	589	639	649	716	690	228	325	403	335	316	426	399	371	458	470	569	456	404	R-132
502	533	427	479	324	339	107	147	513	422	364	550	360	537	665	661	681	751	710	282	399	500	464	427	536	497	446	593	470	636	470	323	R-133
383	393	251	345	167	191	275	255	472	313	348	344	222	470	456	534	583	601	604	164	228	319	254	263	322	306	265	354	293	447	419	445	R-134
375	327	263	371	245	211	105	131	351	268	279	392	279	410	432	486	505	572	542	168	283	357	320	255	362	326	287	385	361	450	367	276	R-135
479	413	348	419	260	253	086	113	413	337	315	508	331	467	617	618	587	649	624	196	310	431	392	317	432	394	363	468	403	556	418	291	R-136
461	405	280	424	242	232	161	159	457	320	392	477	336	496	511	611	643	676	672	175	310	429	342	290	404	377	333	433	392	553	443	399	R-137
356	276	203	348	129	157	182	168	337	214	296	331	235	384	375	456	491	534	519	109	211	278	223	176	261	241	210	276	278	396	328	317	R-138
466	366	366	447	270	281	126	151	463	362	357	536	354	494	668	661	683	715	684	235	338	429	377	343	457	410	374	487	433	588	451	351	R-139
466		383	418	247	290	123	162	492	378	374	496	301	485	567	580	571	669	621	257	319	426	371	415	456	433	412	526	369	553	423	313	R-140
366	383		313	238	271	016	070	335	298	242	416	270	351	432	436	418	515	463	141	289	378	391	317	410	358	324	447	326	429	320	170	R-141
447	418	313		259	277	109	141	427	334	326	455	265	487	531	387	597	712	654	243	357	411	385	336	490	424	366	501	462	603	417	312	R-142
-270	247	259		218	-037	-019	209	207	143	249	271	347		404	358	350	321	404	358	180	209	339	324	732	349	284	253	358	310	342	267	119	R-143
281	290	271	277	218		-013	021	283	214	181	328	234	271	337	353	344	414	378	166	264	303	300	267	367	309	297	382	330	368	267	179	R-144
126	123	016	109	-037	-013	339		253	094	179	030	-004	170	162	211	285	286	284	010	012	048	-010	042	029	062	050	042	126	189	329	145	R-145
151	162	070	141	-019	021	339		244	136	164	081	049	185	161	217	277	291	289	038	033	104	041	066	051	070	050	070	056	156	187	262	R-146
463	492	335	427	209	283	253	244		372		285	390	237	357	445	469	460	531	497	199	258	356	324	310	373	359	326	421	315	457	343	R-147
362	378	298	334	207	214	094	136	372		285	390	237	357	445	471	511	550	539	152	246	325	261	242	328	293	264	345	294	415	357	358	R-148
357	374	242	326	149	181	179	184	415	281		349		439		471	511	550	539	152	246	325	261	242	328	293	264	345	294	415	357	358	R-149
536	496	416	455	343	328	030	081	465	390	349		439			524	736	673		250	393	531	476	387	514	474	443	566	464	638	471	279	R-150
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668	567	432	531	347	337	126	161	604	445	415	664	418	611		870	739	819	787	286	430	568	510	446	590	539	493	639	528	721	541	402	R-172
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680	621	463	654	358	378	284	289	707	497	539	673	455	722	787	115	986	953					310	470	607	524	482	643	586	519	685	594	R-100
235	257	197	243	180	040	038	219	193	152	250	138	228	286		366	294	317	310		374		270	313	141	320	291	388	256	336	280	149	R-211
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377	391	341	385	234	300	-010	041	335	324	261	476	296	412	510	531	495	538	524	270	440	560	505	632	550	481	770	517	561	374	168	R-231
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457	456	410	490	349	367	023	051	431	373	328	514	326	480	590	635	620	637	643	341	496	567	632	587	653	575	876	631	672	482	341	R-233
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374	412	324	366	253	297	034	050	373	326	264	443	280	382	493	515	495	536	519	291	371	458	461	481	575	560	727	443	575	341	269	R-235
487	526	447	501	358	382	042	070	472	421	345	566	345	515	528	677	657	688	685	388	514	617	770	796	876	925	727		607	716	503	339	R-240
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588	553	429	603	342	368	126	156	567	457	415	638	406	597	721	795	786	810	816	336	491	636	561	465	672	599	575	716	649		640	472	R-260
451	423	320	417	267	267	189	187	474	343	327	471	318	482	561	518	468	612	600	280	397	547	374	360	493	374	391	503	482	640		516	R-270
351	313	170	312	119	179	329	262	472	253	358	774	181	408	402	530	623	514	602	149	213	352	168	254	341	308	269	339	339	472	516		R-281
267	273	195	237	152	188	161	131	327	220	246	246	141	278	291	417	341	483	417	200	208	341	200	260	312	269	247	294	294	378	391	492	R-282
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399	402	287	377	270	288	102	103	410	311	315	410	280	424	497	555	578	552	585	240	365	476	387	405	539	537	533	596	498	594	492	529	R-311
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477	412	336	473	277	320	119	124	473	354	343	477	319	503	503	643	691	650	695	278	450	479	473	439	637	519	453	634	618	635	501	453	R-320
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274	184	183	237	136	156	100	096	253	179	255	241	177	275	256	322	380	351	380	112	225	259	240	185	309	238	204	294	332	314	280	274	R-340
532	441	361	501	284	344	150	151	511	377	417	505	342	540	517	692	745	706	749	300	470	511	509	457	661	547	487	663	650	683	549	501	R-410
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086	113	143	073	103	090	-009	051	069	063	130	095	081	090	077	116	089	077	124	330	017	116	209	113	143	112	078	162	133	127	100	031	R-440
138	203	155	108	129	131	013	023	151	136	110	181	128	166	179	176	176	200	192	122	167	304	172	189	191	169	156	220	192	225	216	212	R-440
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-016	-063	035	-025	-008	003	012	-032	-026	-006	-006	025	-006	-039		-038	-036	-025	-033	-008	031	120	-005	-059	-043	-047	-080	-059	002	-041	014	021	A-430
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063	101	096	038	074	076	-001	008	073	059	056	099	085	093	077	079	104	090		097	092	232	086	085	080	065	046	092	043	111	111	138	A-440
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226	317	229	188	161	105	035	029	226	161	252	137	235	209		289	276	308	295	175	187	391	287	284	368	231	323	237	168	F-420		
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138	210	171	106	125	147	-036	014	146	154	106	171	121	132	168	148	120	181	145	108	132	194	197	188	172	156	137	215	126	152	100	-009	R-601
171	206	215	195	159	155	-077	-013	136	172	101	233	155	166	227	209	181	238	206	121	177	242	252	190	239	203	177	264	206	239	146	-006	R-602
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161	203	156	165	093	124	065	086	222	159	155	170	112	196	218	227	228	244	239	106	133	201	188	156	176	167	135	207	144	210	160	118	R-604
202	215	195	206	104	152	027	061	201	180	143	211	133	193	265	248	226	244	265	095	153	222	206	184	208	184	155	244	192	244	191	103	R-605
139	195	207	136	113	140	-065	-000	130	173	081	179	123	134	137	125	132	194	171	067	144	203	241	186	216	180	155	244	163	186	121	-007	R-606
169	203	216	204	173	165	-080	-020	136	166	089	228	167	167	222	209	187	239	210	122	184	223	246	186	238	196	161	257	211	224	144	-016	R-607
072	049	092	097	050	060	010	024	054	048	061	072	084	074	071	070	070	090	081	021	065	118	070	012	-064	035	018	054	093	063	053	-013	R-608
163	211	144	177	088	120	050	059	187	174	152	170	108	175	143	211	222	238	234	099	136	198	167	147	179	166	127	198	144	206	162	112	R-609
208	202	202	229	116	116	062	190	179	142	210	171	142	202	125	254	256	281	272	114	179	226	254	150	237	186	148	244	234	249	190	077	R-610
-140	-030	029	-142	038	037	-221	-174	-162	-037	-209	-015	-019	-174	-105	-199	-291	-186	-262	-012	-048	-043	065	040	-039	-008	005	-001	-124	-136	-185	-338	F-701
-129	-073	-062	-167	-058	-069	-064	-104	-056	-127	-096	-103	-160	-143		-185	-107	-105	-092	-021	-099	-066	-063	-064	-115	-170	-143		F-702		
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-002	-021	-099	-076	-113	-079	243	153	089	-006	070	-083	-062	018	-024	046	098	014	071	-066	-146	-061	-156	-056	-115	-075	-080	-119	-137	-049	023	237	F-705
-088	-071	-091	-138	-144	-107	118	060	-027	-069	-010	-154	-113	-073	-147	-112	-086	-146	-111	-112	-153	-141	-101	-095	-124	-153	-146	-125	-006	F-706		
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-082	-058	010	-095	057	057	-014	-203	-161	-160	-047	164	-030	003	-129	-063	-122	-147	-144	-177	-183	016	-013	-033	-044	-014	-009	-015	-044	-099	-100	-215	F-708
-014	006	099	-036	099	086	-334	-259	-142	003	-102	062	065	-078	002	-072	-147	-079	-127	016	056	034	110	067	091	011	079	099	059	-020	-091	-271	F-709
-020	036	040	005	054	055	-015	-021	027	071	035	012	025	012	014	028	013	015	014	013	012	040	032	030	076	060	082	048	085	064	089	-005	F-710
-012	058	064	036	062	046	-038	-032	030	049	-007	054	012	025	050	041	026	013	015	014	032	030	076	060	082	058	085	064	089	035	055	025	F-711
-021	026	-019	014	113	018	-015	015	052	076	046	040	-025	014	011	035	036	036	016	-001	-009	046	001	013	047	016	-044	035	020	-014	-027	-023	F-712
128	080	068	108	-021	-080	231	138	204	061	161	093	070	174	122	223	279	201	259	-002	008	072	-030	017	016	049	036	022	-047	134	147	278	F-713
065	149	205	100	186	179	-299	-181	-007	107	-032	209	150	041	148	066	-022	094	018	109	154	171	230	262	224	200	201	265	166	152	091	-249	F-714
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030	074	128	015	099	078	-240	-149	-043	054	-001	103	097	023	059	-015	-037	021	-017	038	075	105	140	089	103	086	045	-033	-173	F-716		
181	243	188	157	138	199	-074	-034	166	177	128	232	151	189	242	231	205	246	225	114	152	217	203	216	238	226	212	273	186	236	140	036	F-716
602	560	428	593	351	386	145	162	583	455	434	623	407	608	726	809	818	816	839	348	510	642	568	519	716	625	593	750	684	943	663	558	C-001
612	581	428	605	378	413	130	151	596	476	452	650	419	633	753	836	846	839	865	366	555	671	689	652	831	743	671	892	674	519	C-002	
600	592	483	592	390	403	105	133	581	475	433	667	477	627	774	851	821	833	847	383	545	672	740	725	852	794	701	952	656	817	595	438	C-003
548	449	372	518	299	344	155	142	515	531	385	442	523	560	564	616	592	478	529	519	448	668	550	485	666	665	699	563	520	C-005		
483	417	244	429	162	204	407	346	594	346	447	388	254	549	546	714	868	693	830	194	275	403	263	312	408	384	322	423	584	581	810	C-005
614	543	396	580	310	353	267	254	645	450	445	584	387	648	715	846	927	845	923	319	474	601	506	481	670	587	529	691	649	850	724	714	C-006

Table V-4 (continued)

Var#	Var	Code	Description	58 Vis.in 2 Dimens	59 Vis.in 3 Dimens	60 Abstract Reason.	61 Math I	62 Math II	63 Math I+II	64 Math III	65 Math Tot(I+II+III)	66 Arith Computation	67 Table Reading	68 Clerical Checking	69 Object Inspection	70 Arith Computation	71 Table Reading	72 Clerical Checking	73 Object Inspection	74 Arith Computation	75 Table Reading	76 Clerical Checking	77 Object Inspection	78 Preferences	79 Sociability	80 Soc.Sensitivity	81 Impulsiveness	82 Vigor	83 Calmness
	1		Grade	190	194	297	284	294	317	193	322	305	185	166	177	198	021	088	110	263	233	264	203	025	171	171	044	143	149
	2		Sex (1=M, 2=F)	-153	-118	-0C6	-048	-030	-042	-089	-057	111	062	125	090	055	-041	081	058	118	124	165	099	-019	186	245	020	024	081
1	3	R-101	Info I: Screening	215	191	313	328	324	356	132	341	449	190	147	194	278	-038	050	111	404	298	293	231	132	262	248	092	211	236
2	4	R-102	" Vocab I	371	441	526	636	619	684	323	67C	435	159	076	155	273	-033	-024	062	387	251	259	210	012	115	177	099	2C8	226
3	5	R-103	" Literature	300	377	481	261	585	627	339	624	403	176	118	174	261	-019	021	088	249	260	276	217	011	118	207	110	182	264
4	6	R-104	" Music	272	352	445	493	518	554	278	545	387	172	121	18C	252	-001	033	106	332	237	258	224	008	167	236	101	197	222
5	7	R-105	" Soc.Studies	339	412	5C2	604	605	660	303	644	445	146	065	138	281	-044	-029	051	394	243	240	189	004	098	158	073	186	203
6	8	R-106	" Math	332	452	5C2	628	732	749	474	760	437	129	095	137	312	015	016	066	339	204	224	176	-022	070	147	070	162	268
7	9	R-107	" Phys.Sci	343	439	459	541	555	600	3C8	595	335	102	011	108	224	-035	-056	044	282	176	149	152	-006	014	087	049	138	161
8	10	R-108	" Bio.Sci	3C2	387	433	509	503	552	281	549	315	105	017	120	182	-048	-059	047	301	192	174	166	-004	057	123	060	158	166
9	11	R-109	" Sci Attitude	366	253	459	533	496	56C	256	567	332	135	067	146	237	-048	-023	049	361	233	232	204	-022	131	180	059	166	196
10	12	R-110	" Aero & Space	277	339	325	385	375	415	244	416	153	055	-030	065	084	-027	-070	017	152	102	070	094	-017	-031	-001	042	094	108
11	13	R-111	" Elec & Electron	288	381	318	397	380	424	247	427	188	061	-020	054	121	-025	-057	016	163	1C9	070	083	005	-028	-000	031	084	125
12	14	R-112	" Mechanical	336	376	325	407	361	417	207	411	201	061	-045	070	117	-024	-083	022	192	108	059	105	030	-006	-031	036	132	109
13	15	R-113	" Farming	292	341	378	469	429	488	188	473	355	090	021	092	223	-056	-089	030	317	179	135	139	041	097	114	055	190	176
14	16	R-114	" Home Ec	161	226	318	350	333	372	113	351	354	149	117	180	214	-036	035	105	326	240	245	211	009	219	283	068	165	225
15	17	R-115	" Sports	316	302	375	463	454	500	266	496	360	136	046	117	249	-004	-021	062	289	183	169	145	057	122	061	075	230	157
	18	R-131	Info II:Art	304	368	459	497	503	547	276	540	386	180	111	198	243	-019	018	110	344	265	264	240	028	149	228	099	183	221
	19	R-132	" Law	271	330	379	488	475	525	265	519	319	120	049	116	201	-035	-022	043	283	200	181	158	002	065	105	072	129	159
	20	R-133	" Health	251	308	432	490	499	540	242	521	433	167	100	179	266	-050	-001	083	392	279	268	227	026	180	234	065	209	231
21	R-134	" Engineering		292	339	339	402	383	428	256	420	286	112	035	120	183	-023	-019	063	250	178	139	150	039	080	079	049	175	162
	22	R-135	" Architecture	217	269	3C8	373	374	408	22C	405	274	110	075	121	188	002	015	070	224	149	171	144	024	080	121	064	103	135
	23	R-136	" Journalism	223	268	354	442	440	481	216	469	331	123	078	119	214	-027	002	056	286	196	209	155	011	119	180	076	156	187
	24	R-137	" Foreign Travel	270	312	375	437	439	478	244	473	289	134	064	128	188	004	-006	063	249	180	193	162	008	051	113	072	126	137
	25	R-138	" Military	196	217	249	333	346	371	207	369	203	083	032	076	148	014	-015	043	154	100	121	090	033	044	075	086	113	134
	26	R-139	" Acct.Bus.Sales	267	319	399	515	477	539	274	532	369	153	086	138	234	-016	004	063	325	226	224	176	008	138	171	097	161	202
	27	R-140	" Pract.Knovl.	273	293	4C2	430	412	459	184	441	410	186	113	201	244	-063	010	101	382	317	286	255	038	210	200	058	203	215
	28	R-141	" Clerical	185	194	287	336	336	367	183	361	348	176	143	155	240	015	066	096	283	227	247	178	051	171	215	080	156	195
	29	R-142	" Bible	237	291	377	469	473	515	237	501	348	119	073	108	229	-025	000	038	296	188	198	148	033	106	195	101	165	2C6
30	R-143	" Colors		152	203	27C	261	277	295	136	284	233	094	103	129	144	-008	042	074	210	137	189	152	-013	135	159	050	093	104
31	R-144	" Etiquette		188	210	288	316	329	353	156	344	295	119	099	131	177	003	039	076	248	161	186	154	026	147	155	055	124	152
32	R-145	" Hunting		161	157	1C2	154	116	145	1C	150	053	013	-060	013	068	003	-065	-001	033	015	-022	029	028	-136	-077	022	065	027
33	R-146	" Fishing		131	130	1C3	148	124	148	096	151	075	033	-009	023	061	012	-019	008	048	035	017	027	061	014	-013	044	086	061
	34	R-147	" Outdr Act(Other)	327	358	410	477	473	519	255	511	368	143	051	151	231	-032	-027	073	328	229	200	192	033	146	136	074	222	071
	35	R-148	" Photography	220	240	311	349	354	385	179	377	315	132	069	136	192	-026	-006	059	288	206	201	175	017	154	172	063	159	180
	36	R-149	" Games	264	289	315	360	393	413	255	417	295	128	063	110	207	-006	004	056	234	181	160	138	017	106	101	088	155	143
	37	R-150	" Theater,ballet	246	296	410	468	477	517	241	505	185	179	130	181	242	-006	033	099	342	252	282	218	037	171	233	108	170	711
	38	R-151	" Foods	141	192	28C	314	319	346	177	342	228	118	095	128	143	075	038	085	203	137	171	138	008	121	155	091	112	133
	39	R-152	" Miscellaneous	278	344	424	491	509	547	275	540	384	167	081	161	256	-006	000	093	324	235	222	199	036	132	146	080	145	193
40	R-162	" Vocabulary II		299	386	491	574	559	618	256	597	432	190	096	179	256	-039	-010	077	405	299	285	235	-017	168	227	073	218	240
	41	R-172	Vocab Tot. (I & II)	371	453	555	660	643	711	322	692	466	183	090	176	287	-038	-020	072	423	289	288	235	002	154	209	096	227	248
16	42	R-190	Info I Total	417	507	578	689	691	754	385	745	482	175	071	176	309	-036	-032	079	422	276	263	232	015	120	181	094	228	250
	43	R-192	Info II Total	383	449	552	653	650	711	351	700	449	206	116	209	322	-025	003	104	434	308	308	262	040	181	238	123	244	274
44	R-100	Info Total (I & II)		417	500	585	695	695	759	380	749	501	191	089	192	322	-033	-020	090	437	295	286	249	024	145	206	107	239	265
17	45	R-211	Memory for Sentences	150	161	264	295	278	312	112	300	320	122	077	122	218	-008	017	059	262	175	173	152	026	108	121	015	116	095
18	46	R-212	Memory for Words	2C8	256	365	425	450	479	225	470	409	158	124	164	295	031	045	097	313	187	241	198	030	132	177	053	133	153
19	47	R-220	Disguised Words	341	344	410	473	479	520	251	511	432	321	330	304	334	120	227	232	336	321	410	310	075	194	242	094	201	222
20	48	R-231	English:Spelling	2C0	231	387	460	493	523	240	509	519	205	209	192	355	-005	098	086	424	287	359	212	015	197	252	048	188	206
21	49	R-232	" Capitalization	240	263	4C5	427	439	473	185	457	497	178	113	189	331	-059	015	085	418	301	278	246	016	188	190	020	156	166
22	50	R-233	" Punctuation	312	359	539	605	637	678	304	661	555	196	143	191	373	-043	026	040	462	311	333	253	-045	172	239	031	176	2C8
23	51	R-234	" Usage	264	316	457	514	519	565	236	547	469	180	112	169	295	-047	004	065	417	294	300	223	-016	156	203	031	167	184
24	52	R-235	" Eff. Exp.	247	304	433	472	453	5C4	204	4.7	400	141	078	126	227	-088	-024	046	387	280	264	223	-071	137	177	008	135	146
25	53	R-230	" Total	320	377	556	617	634	684	294	663	514	225	162	220	401	-059	029	092	526	368	380	292	-022	175	264	034	2C7	228
26	54	R-240	Word Functions	294	405	458	579	618	656	332	650	453	170	133	192	317	002	047	113	161	231	263	227	-047	126	206	044	144	192
27	55	R-250	Reading Comprehension	378	477	594	652	635	7C2	314	683	486	205	127	225	297	-041	006	111	444	323	334	283	-030	152	239	077	210	244
28	56	R-260	Creativity	391	477	492	524	5C1	558	28C	569	358	183	100	216	233	014	019	138	308	237	232	248	011	130	146	055	160	191
29	57	R-270	Mechanical Reasoning	492	586	522	472	453	5C4	274	501	234	137	031	212	152	021	-023	138	207	168	134	239	-030	-009	-006	022	118	103
30	58	R-281	Vis. in 2 Dimens		490	439	353	359	389	200	384	101	219	165	303	161	065	108	236	230	236	217	366	044	058	047	027	116	122
31	59	R-282	Vis. in 3 Dimens	490		550	452	457	497	244	490	262	165	076	262	153	-003	008	172	249	217	191	293	-047	-005	046	007	090	113
32	60	R-290	Abstract Reasoning	438	550		53C	534	581	262	566	389	191	109	272	225	-037	009	150	372	299	278	330	-085	179	121	005	136	144
33	61	R-311	Math I	353	452	530		672	893	344	859	494	156	061	133	333	-021	-027	037	411	235	223	188	-052	100	144	053	152	181
34	62	R-312	Math II	359	457	534	672		933	344	915	540	175	093	157	383	-008	003	069	424	248	248	209	-034	103	160	041	166	201
35	63	R-320	Math I & II	389	477	581	843	933		434	972	568	182	086	160	394	-015	-011	0c0	457	265	259	210	-045	111	167	051	175	210
36	64	R-333	Math III	2C0	244	262	349	444	439		610	251	103	103	094	212	058	069	06C	152	684	132	099	-013	030	074	036	072	115
37	65	R-340	Math Total(I+II+III)	384	490	566	859	915	972	610		552	182	099	163	391	000	006	012	432	249	257	214	-042	105	165	053	164	210
42	66	R-410	Arith Computation	3C1	262	389	474	540	568	251	552		325	269	271	813	121	175	2C2	646	327	357	286	153	257	237	072	237	238
43	67	R-420	Table Reading	219	155	191	156	175	182	103	182	325		475	458	309	685	423	447	152	693	384	387	229	155	138	068	148	155
44	68	R-430	Clerical Checking	165	076	1C7	061	093	C86	103	099	475	475		448	310	397	942	414	055	259	696	343	242	164	147	081	127	156
45	69	R-440	Object Inspection	301	262	273	133	157	160	099	163	271	458	448		246	264	391	884	142	367	376	916	179	157	122	059	133	133
46	70	A-410	Arith Computation	219	153	225	333	383	394	212	391	813	309	310	246		297	292	217	082	131	217	181	228	204	188	103	188	204
47	71	A-420	Table Reading	065	-003	-037	-021	-0C8	-C15	059	00C	121	685	397	264	297		453	415	-182	-050	107	089	278	072	054	098	065	083
48	72	A-430	Clerical Checking	1C8	008	0C9	-027	0C3	-C11	060	006	175	423	942	311	292	453		473	-082	132	415	250	279	128	108	095	095	125
49	73	A-440	Object Inspection	236	172	15C	C37	C69	C60	080	072	2C2	447	474	884	277	415	473		-C15	203	275	670	251	139	104	087	119	116
38	74	F-410	Arith Computation	230	249	372	411	424	457	152	432	646	152	055	142	082	-182	-082	-015		188	327	254	-037	171	158	-012	158	140
39	75	F-420	Table Reading	236	217	291	255	248	265	084	249	327	693	259	367	131	-050	132	203	188		422	444	038	141	135	-003	140	131
40	76	F-430	Clerical Checking	217	191	278	223	248	259	132	257	357	384	696	376	217	107	415	275	327	422		397	086	171	168	017	142	156
41	77	F-440	Object Inspection	3C9	293	330	188	209	218	099	214	288	343	343	916	181	689	256	670	254	235	397		086	144	113	020	126	123
50	78	A-500	Preferences	044	-070	-085	-C52	-034	-045	-013	-042	153	229	242	179	228	278	279	251	-037	C38	059	086		184	137	242	142	154
51	79	R-601	SAI: Sociability	C58	-005	079	100	163	111	030	105	257	155	164	171	204	072	128	139	171	141	171	144	184		551	276	536	463
52	80	R-602	" Soc.Sensitivity	047	046	121	144	160	167	074	105	237	138	147	122	188	054	108	104	158	135	168	113	137	551		253	475	602
53	81	R-603	" Impulsiveness	027	007	065	053	041	051	030	053	072	C68	081	065	103	098	095	087	-012	-031	017	020	242	276	253		266	173
54	82	R-604	" Vigor	116	-090	136	152	166	175	072	169	237	148	127	133	188	065	095	119	158	140	142	126	142	536	475	266		458
55	83	R-605	" Calmness	122	113	144	181	201	210	115	210	238	155	156	133	204	083	125	116	140	131	156	123	154	463	602	173	458	
56	84	R-606	" Tidiness	056	033	1C1	124	141	145	046	137	258	149	178	147	210	060	137	124	1C7	146	190	140	162	456	568	146	438	546
57	85	R-607	" Culture	050	039	144	144	173	175	084	172	243	140	167	122	193	059	129	105	162	133	175	114	156	493	640	223	461	555
58	86	R-608	" Leadership	0C8	-000	017	055	081	076	061	082	118	106	140	070	149	128	144	092	006	017	069	037	110	360	409	240	401	384
59	87	R-609	" Self-Confidence	105	091	118	150	172	177	081	172	198	119	128	112	155	039	094	090	135	124	146	110	111	393	311	130	313	428
60	88	R-610	" Mature Personality	089	045	135	204	242	246	127	245	287	144	166	121	241	069	133	108	174	129	166	107	161	441	615	217	521	612
89	F-701	Int Inv: Phys Sci		-159	-225	-144	-204	-242	-246	-206	-258	-047	-006	010	005	-065	-037	000	005	006	028	029	024	-014	070	028	-030	-099	-081
90	F-702	" Biol Sci & Med		-063	-102	-1C4	-132	-179	-173	-143	-181	-071	-038	-055	-032	-074	-022	-045	-035	-025	-031	-052	-022	-037	-064	-133	-063	166	-149
91	F-703	" Pub Serv.		-002	-017	-018	-035	-057	-C52	-064	-057	002	004	-025	021	-035	-010	-034	007	048	035	017	037	-040	-053	-047	-052	-068	-068
92	F-704	" Lift-Ling.		018	-C18	-054	-095	-125	-122	-074	-123	-075	-024	-069	-017	-080	-012	-054	-017	-023	-121	-070	-011	-117	-222	-109	-116	-144
93	F-705	" Soc.Serv.		098	076	013	008	-032	-016	063	-013	-075	-024	-069	-017	-080	-012	-054	-017	-023	-121	-070	-011	-117	-222	-109	-116	-144
94	F-706	" Artistic		-040	-130	-124	-017	-090	-092	-048	-104	-044	-026	-048	-089	-041	-001	-030	-073	020	-035	-067	-084	-021	-079	-181	-173	-115
95	F-707	" Musical		C33	-006	0C6	017	-026	-C08	-024	-010	014	017	-027	-015	-013	-008	-028	-018	042	-132	-012	-006	-003	-031	-148	-044	-039	-081
96	F-708	" Sports		-132	-096	-092	-106	-113	-120	-080	-124	-091	-039	-017	-029	-012	-031	-015	-029	-035	-027	-016	-023	-079	-113	-019	-074	-088
97	F-709	" Outdr Rec.		-117	-169	-055	-051	-032	-044	-047	-046	044	024	065	012	016	-008	046	008	055	040	078	016	-050	053	086	-052	-113	000
98	F-710	" Bus.Mgmt.		-014	008	072	055	061	051	047	044	036	027	-000	037	-023	-016	-035	-006	040	051	043	053	-028	-028	005	-055	-017	-0C3
99	F-711	" Sales		C37	015	037	0C9	015	C14	-008	009	036	027	-000	037	005	-015	-019	011	055	052	053	053	-028	-028	005	-055	-017	-0C3
100	F-712	" Computation		-031	-057	-018	-072	-086	-087	-054	-067	088	064	-044	-011	-102	-056	-055	-028	-017	-C06	-014	000	-040	-043	017	-051	-080
101	F-713	" Office Work		120	-123	101	171	140	167	107	155	-009	-026	-066	-016	-025	-015	-017	-030	018	-032	-028	0C3	-018	-103	-089	028	-051	-014
102	F-714	" Mech-Tech		-060	-078	063	028	070	056	-011	049	158	084	077	117	079	-033	062	068	148	155	186	137	-020	159	199	004	036	081
103	F-715	" Skilled Trades		030	026	115	109	143	140	054	137	158	077	063	093	078	-013	012	042	170	141	146	123	-021	078	113	-017	025	081
104	F-716	" Farming		-058	-052	000	-002	039	023	005	024	073	048	113	066	057	-014	047	090	090	086	132	064	001	101	105	-009	-048	047
105	F-717	" Labor		074	072	161	142	177	176	069	170	197	098	097	135	099	-036	037	075	209	171	185	165	-018	142	154	-004	085	125
106	C-001	Composite: I.Q.Comp.		444	562	782	802	709	820	344	832	532	219	124	249	329	-041	-001	12C	480	341	339	314	-056	141	217	061	205	236
107	C-002	" Gen.Acad.Apt.		423	524	679	800	819	886	401	863	419	233	142	239	-039	011	116	530	359	364	304	-015	175	247	061	223	254
108	C-003	" Verbal		365	439	604	686	698	757	342	737	604	230	153	225	390	-053	018	096	524	368	379	296	-012	202	269	069	230	254
109	C-004	" Quantitative		394	501	576	820	927	263	477	622	979	550	185	105	163	392	005	011	075	428	249	260	212	-038	100	166	058	175	215
110	C-005	" Technical		435	534	5C3	564	545	605	323	602	298	111	-006	136	186	-025	-070	064	267	178	135	179	-040	-003	030	047	150	158
**	111	C-006	" Sci. Apt.	484	606	7C7	808	791	872	461	866	511	198	086	216	332	-023	-021	105	440	295	281	275	-034	093	159	063	201	232

Table V-4 (continued)

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Column headers (diagonal labels, left to right): Tidiness, Culture, Leadership, Self-Confidence, Mature Personality, Phys Sci., Biol Sci & Med, Pub Serv., Literary, Soc. Service, Artistic, Musical, Sports, Outdr Rec., Bus.-Mgmt, Sales, Computation, Office Work, Mech-Tech, Skilled Trades, Farming, Labor, I.Q. Comp., Gen.Acad.Apt., Verbal, Quantitative, Technical, Sci. Apt.

Numeric column headers: 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | MEAN | S.D. | Code

Note.— Decimal points have been omitted from the correlation coefficients.
*See footnote on Table V-2a.

** See footnote on page A-15.

on a representative ten per cent sample* of the Project TALENT 15-year-olds in Grades 9-12 (regular sample), and all of the Project TALENT 15-year-olds below Grade 9 or not in school at all. Only complete cases are used, and the cases are unweighted. The groups of 15-year-olds on whom correlations are based, and the corresponding numbers of cases (unweighted, of course), are as follows:

Table V-2a.	Boys in high school	N=3373
Table V-2b.	Boys not in high school	N= 283
Table V-2c.	All boys	N=3656
Table V-3a.	Girls in high school	N=3829
Table V-3b.	Girls not in high school	N= 163
Table V-3c.	All girls	N=3992
Table V-4.	Total group	N=7648

The corresponding means and standard deviations are summarized in Table V-5.

Comparison of the means and standard deviations shown in Table V-5, based on unweighted data, with the corresponding values in Table IV-5, based on weighted data, shows enough similarity to suggest that the correlations in Tables V-2 to V-4 are probably fairly close to the values that would have been obtained if Weight D had been applied. (Use of Weight D would have yielded estimates of the correlations for the complete population of 15-year-olds.)

For 60 of the 111 variables, four correlation matrices are shown in Appendix B. They are for Grade 9 boys, Grade 9 girls, Grade 12 boys, and Grade 12 girls, respectively. No weights have been applied to the cases. The correlation coefficients for 15-year-old boys and girls in school (Tables V-2a and V-3a respectively) are quite like the ones for Grade 9 boys and Grade 9 girls (Tables B-1 and B-2 respectively). This, of course, is not surprising, since there is a tremendous amount of overlap between the age groups and the grade groups.

Figure V-1 shows the correlation of key tests with Reading Comprehension (R-250) for the 15-year-old high school boys, for the 15-year-old boys not in high school, and for the two groups combined. The correlations tend to be lowest for the group not in high school. The correlations for the two samples combined tend to run slightly higher than those for high school students only, because combining the samples increases the range. Similar graphs are presented in Figures V-2 and V-3, which show correlations of key tests with Mathematics Part II (R-312) and Mechanical Information (R-112), respectively.

Comparison of Figures V-1 and V-2 reveals that the discrepancies between correlations for the high school cases and those for the non-high school cases are even more extreme in the case of Mathematics . Part II than for Reading Comprehension. This is probably due to the fact that even students who do not get to high school can learn to read

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*The ten per cent sample consists of students whose six-digit testing numbers end with the digit "3".

Table V-5

Means and Standard Deviations for 15-Year-Olds* on 111 Project TALENT Scores
(Based on Same Groups as the Correlation Matrices in Tables V-2, V-3, V-4)

Vari-able	Test	Boys Grades 9-12 N=3373		Boys Non-High-School N=283		Boys Combined N=3656		Girls Grades 9-12 N=3829		Girls Non-High-School N=163		Girls Combined N=3992		All Cases N=7648	
		Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ
1	Grade	10.40	.54	8.00	2.20	10.22	1.03	10.48	.54	7.77	2.52	10.37	.91	10.30	.97
2	Sex (1=M, 2=F)	1.00	.00	1.00	.00	1.00	.00	2.00	.00	2.00	.00	2.00	.00	1.52	.50
3	R-101 Screening	11.23	1.44	8.80	2.67	11.04	1.70	11.52	1.10	9.44	2.45	11.43	1.25	11.25	1.50
4	R-102 Vocabulary I	12.20	3.99	5.94	3.31	11.72	4.28	10.85	4.05	4.91	2.62	10.61	4.17	11.14	4.26
5	R-103 Literature	11.50	4.44	5.99	2.93	11.07	4.58	11.19	4.28	5.65	2.65	10.97	4.37	11.02	4.47
6	R-104 Music	5.56	2.89	2.59	1.79	5.33	2.92	6.12	2.87	2.81	1.88	5.98	2.91	5.67	2.93
7	R-105 Social Studies	14.32	5.35	6.66	4.16	13.72	5.65	12.28	4.99	5.62	3.34	12.00	5.11	12.83	5.44
8	R-106 Math	8.47	4.71	3.75	2.15	8.11	4.73	7.20	4.28	3.48	1.91	7.04	4.27	7.55	4.53
9	R-107 Physical Sciences	9.12	3.92	4.44	2.61	8.76	4.03	6.99	3.51	3.50	2.06	6.85	3.53	7.76	3.90
10	R-108 Biol.Sciences	6.12	2.44	3.30	1.90	5.90	2.52	5.27	2.33	2.74	1.59	5.17	2.36	5.52	2.46
11	R-109 Sci. Attitude	5.61	1.98	3.07	1.87	5.41	2.08	5.61	1.97	2.92	1.65	5.50	2.02	5.46	2.06
12	R-110 Aero and Space	4.58	2.37	2.29	1.58	4.41	2.39	2.63	1.63	1.69	1.22	2.59	1.63	3.46	2.22
13	R-111 Elect & Electro.	8.64	4.14	4.30	2.41	8.31	4.20	5.23	2.49	3.63	2.00	5.17	2.49	6.67	3.76
14	R-112 Mechanical	11.38	3.45	6.32	3.30	10.99	3.70	7.10	2.84	4.45	2.44	7.00	2.88	8.91	3.85
15	R-113 Farming	7.53	2.45	4.32	2.53	7.28	2.60	6.73	2.58	3.85	2.22	6.61	2.63	6.93	2.64
16	R-114 Home Economics	7.89	2.86	4.95	2.54	7.66	2.94	11.79	3.36	6.32	2.97	11.57	3.51	9.70	3.79
17	R-115 Sports	7.62	3.05	3.64	2.24	7.31	3.18	5.17	2.45	2.81	1.69	5.08	2.47	6.14	3.04
18	R-131 Art	5.76	2.52	2.74	1.90	5.53	2.60	5.95	2.56	2.62	1.88	5.81	2.62	5.68	2.62
19	R-132 Law	4.50	1.83	2.55	1.45	4.35	1.88	3.95	1.63	2.38	1.44	3.89	1.65	4.11	1.78
20	R-133 Health	5.33	2.11	2.60	1.83	5.12	2.21	5.78	2.00	2.61	1.78	5.65	2.08	5.40	2.16
21	R-134 Engineering	3.02	1.28	1.59	1.14	2.91	1.32	2.39	1.28	1.26	1.06	2.35	1.29	2.62	1.33
22	R-135 Architecture	2.48	1.33	1.56	1.05	2.41	1.33	2.44	1.26	1.51	.98	2.40	1.26	2.40	1.30
23	R-136 Journalism	1.56	.98	.68	.71	1.49	.99	1.55	.97	.66	.77	1.51	.98	1.50	.98
24	R-137 Foreign Travel	2.60	1.32	1.38	1.10	2.51	1.35	2.17	1.29	1.05	.95	2.12	1.30	2.31	1.34
25	R-138 Military	2.33	1.45	1.37	1.18	2.26	1.45	1.76	1.18	1.07	1.02	1.73	1.18	1.98	1.34
26	R-139 Acct,Bus,Sales	4.20	1.87	2.12	1.42	4.04	1.92	4.07	1.87	2.16	1.56	4.00	1.90	4.02	1.91
27	R-140 Pract Knowl.	2.88	1.03	1.36	1.10	2.76	1.11	2.98	.91	1.54	1.07	2.92	.96	2.84	1.04
28	R-141 Clerical	1.38	.84	.68	.68	1.33	.85	1.75	.89	.61	.77	1.70	.92	1.52	.90
29	R-142 Bible	6.64	3.28	3.34	2.02	6.38	3.32	6.76	3.22	3.66	2.12	6.63	3.24	6.51	3.28
30	R-143 Colors	1.08	.86	.84	.77	1.06	.85	1.54	.92	.80	.73	1.51	.92	1.30	.92
31	R-144 Etiquette	.82	.69	.41	.57	.79	.69	1.08	.73	.39	.57	1.05	.74	.92	.73
32	R-145 Hunting	2.09	1.22	1.36	1.07	2.03	1.22	1.05	.92	.85	.75	1.04	.91	1.52	1.18
33	R-146 Fishing	1.04	1.22	.65	.75	1.59	1.22	.98	.90	.81	.75	.97	.90	1.27	1.11
34	R-147 Other Outdr Act.	4.73	1.94	2.21	1.52	4.53	2.03	4.11	1.87	2.08	1.54	4.03	1.90	4.27	1.98
35	R-148 Photography	1.19	.76	.56	.65	1.14	.77	1.24	.68	.52	.57	1.21	.70	1.18	.73
36	R-149 Games	2.41	1.22	1.29	1.02	2.33	1.24	1.98	1.01	1.05	.85	1.94	1.02	2.12	1.15
37	R-150 Theatre & Ballet	3.64	1.69	1.90	1.22	3.51	1.72	4.18	1.74	1.90	1.25	4.09	1.78	3.81	1.78
38	R-151 Foods	1.09	.96	.65	.75	1.06	.96	1.31	1.02	.56	.71	1.28	1.02	1.17	1.00
39	R-152 Miscellaneous	4.67	1.86	2.48	1.66	4.50	1.94	4.31	1.69	2.15	1.30	4.22	1.73	4.36	1.84
40	R-162 Vocabulary II	5.41	2.34	2.42	1.75	5.18	2.43	5.61	2.17	2.45	1.82	5.48	2.24	5.34	2.34
41	R-172 Vocab Tot (I+II)	17.61	5.90	8.36	4.44	16.89	6.30	16.46	5.76	7.36	3.63	16.09	5.96	16.47	6.14
42	R-190 Info I Total	131.79	36.92	70.37	27.28	127.04	39.80	115.69	32.14	63.83	21.17	113.57	33.38	120.01	37.20

Table V-5 (continued)

Means and Standard Deviations for 15-Year-Olds* on 111 Project TALENT Scores
(Based on Same Groups as the Correlation Matrices in Tables V-2, V-3, V-4)

Variable	Test	Boys Grades 9-12 N=3373		Boys Non-High-School N=283		Boys Combined N=3656		Girls Grades 9-12 N=3829		Girls Non-High-School N=163		Girls Combined N=3992		All Cases N=7648	
		Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ
43	R-192 Info. II Total	66.04	20.66	34.66	14.05	63.63	21.89	63.33	18.49	32.24	11.68	62.05	19.28	62.81	20.58
44	R-100 Info.Tot. (I+II)	197.81	56.00	105.02	39.66	190.65	60.25	179.01	49.28	96.06	31.42	175.62	51.39	182.82	56.28
45	R-211 Mem.for Sent.	8.75	3.08	6.41	3.28	8.57	3.16	9.46	3.06	7.03	3.25	9.36	3.11	8.98	3.16
46	R-212 Mem.for Words	10.42	4.99	6.68	3.61	10.13	4.99	11.97	5.55	6.74	3.65	11.75	5.58	10.98	5.37
47	R-220 Disguised Words	13.63	6.67	6.61	3.81	13.09	6.76	14.77	6.91	6.23	4.05	14.42	7.03	13.78	6.93
48	R-231 Spelling	8.17	3.05	4.64	2.49	7.90	3.16	9.47	2.86	5.54	2.75	9.31	2.96	8.63	3.14
49	R-232 Capitalization	28.23	4.89	21.59	7.12	27.72	5.40	29.58	4.11	22.48	7.00	29.29	4.49	28.54	5.01
50	R-233 Punctuation	16.17	4.56	10.24	3.73	15.72	4.77	17.89	4.55	10.95	3.91	17.60	4.73	16.70	4.84
51	R-234 Usage	15.65	3.57	10.98	3.84	15.29	3.80	16.71	3.27	11.37	3.47	16.49	3.44	15.92	3.67
52	R-235 Effective Expr.	7.84	2.59	5.11	2.44	7.63	2.68	8.58	2.25	5.40	2.48	8.45	2.34	8.06	2.54
53	R-230 English Total	76.06	14.57	52.56	15.33	74.26	15.94	82.23	13.31	55.74	15.18	81.14	14.38	77.85	15.53
54	R-240 Word Functions	8.89	5.08	5.04	2.36	8.59	5.03	10.36	5.55	5.06	2.21	10.15	5.56	9.40	5.37
55	R-250 Reading Compre.	27.46	11.20	12.64	7.20	26.32	11.64	28.54	10.50	13.18	6.43	27.92	10.80	27.15	11.24
56	R-260 Creativity	8.42	3.94	4.59	2.74	8.13	4.00	7.80	3.71	4.04	2.24	7.64	3.74	7.87	3.87
57	R-270 Mechanical Reas.	11.93	4.14	7.32	3.51	11.57	4.28	8.30	3.49	4.87	2.34	8.16	3.52	9.79	4.25
58	R-281 Vis. in 2 Dimen.	13.33	5.80	8.91	5.56	12.99	5.90	11.42	5.63	6.13	4.39	11.20	5.68	12.06	5.86
59	R-282 Vis. in 3 Dimen.	8.59	3.37	5.92	2.71	8.38	3.40	7.73	2.97	5.07	2.31	7.62	2.99	7.99	3.22
60	R-290 Abstract Reason.	8.65	3.08	4.80	2.95	8.35	3.24	8.48	3.06	4.32	2.32	8.31	3.14	8.33	3.19
61	R-311 Math I	8.10	3.53	4.22	2.27	7.80	3.60	7.62	3.44	3.67	2.04	7.46	3.49	7.62	3.54
62	R-312 Math II	10.24	4.59	5.31	2.40	9.85	4.65	9.78	4.19	4.90	2.39	9.58	4.24	9.71	4.44
63	R-320 Math I+II	18.34	7.44	9.53	3.74	17.65	7.59	17.40	6.92	8.57	3.54	17.04	7.03	17.33	7.31
64	R-333 Math III	2.94	2.02	2.16	1.68	2.88	2.00	2.58	1.76	1.86	1.46	2.55	1.76	2.71	1.88
65	R-340 Math Tot.I+II+III	21.28	8.63	11.69	4.25	20.53	8.75	19.98	7.83	10.43	4.02	19.59	7.94	20.04	8.35
66	R-410 Arith. Comp.	35.46	9.94	23.66	10.07	34.55	10.44	37.49	10.20	23.11	9.91	36.90	10.57	35.78	10.58
67	R-420 Table Reading	11.39	8.15	6.37	5.90	11.00	8.11	12.17	7.52	7.15	7.44	11.96	7.59	11.50	7.86
68	R-430 Clerical Checking	34.80	14.96	27.54	13.36	34.23	14.97	36.32	14.57	29.69	16.10	37.97	14.73	36.18	14.96
69	R-440 Object Inspect.	21.84	7.67	16.97	7.28	21.47	7.75	23.03	6.97	17.70	7.75	22.81	7.08	22.17	7.44
70	A-410 Arith. Comp.	39.50	10.71	32.68	15.05	38.98	11.26	40.54	9.98	31.40	14.18	40.17	10.34	39.60	10.80
71	A-420 Table Reading	15.72	12.12	19.00	19.97	15.98	12.92	15.07	9.38	14.79	14.84	15.06	9.66	15.50	11.35
72	A-430 Clerical Checking	39.69	16.02	37.75	17.92	39.54	16.18	42.28	15.09	37.83	18.35	42.10	15.26	40.87	15.76
73	A-440 Object Inspect.	23.67	7.89	21.24	8.67	23.48	7.98	24.49	7.15	21.56	8.45	24.37	7.23	23.94	7.61
74	F-410 Arith. Comp.	23.30	25.27	-.34	36.87	21.24	27.29	28.32	19.96	-.18	35.62	27.09	21.66	24.29	24.69
75	F-420 Table Reading	7.04	11.92	-.63	15.36	6.01	12.72	9.26	9.58	.50	13.55	8.86	9.96	7.50	11.46

Table V-5 (continued)

Means and Standard Deviations for 15-Year-Olds on 111 Project TALENT Scores*
(Based on Same Groups as the Correlation Matrices in Tables V-2, V-3, V-4)

Vari-able	Test	Boys						Girls						All Cases N=7648	
		Grades 9-12 N=3373		Non-High-School N=283		Combined N=3656		Grades 9-12 N=3829		Non-High-School N=163		Combined N=3992			
		Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ	Mean	σ
76	F-430 Clerical Checkng	20.10	21.50	-.02	26.62	18.30	22.80	26.44	20.06	5.26	25.81	25.58	20.75	22.10	22.05
77	F-440 Object Inspect.	19.94	9.05	12.71	10.68	19.38	9.39	21.43	7.80	13.85	11.06	21.12	8.10	20.29	8.78
78	A-500 Preferences	58.66	26.78	58.13	36.03	58.62	27.60	57.97	22.30	50.32	29.87	57.66	22.71	58.12	25.17
	Student Activities Inventory Scales														
79	R-601 Sociability	5.93	2.91	4.35	2.40	5.81	2.91	7.01	2.92	4.85	2.92	6.92	2.95	6.39	2.98
80	R-602 Soc.Sensitivity	3.80	2.21	2.86	2.00	3.72	2.21	4.95	2.32	3.21	2.17	4.88	2.34	4.33	2.35
81	R-603 Impulsiveness	1.85	1.58	1.94	1.66	1.86	1.59	1.93	1.64	1.66	1.66	1.92	1.65	1.89	1.62
82	R-604 Vigor	3.55	2.08	2.41	1.77	3.46	2.08	3.62	2.13	2.16	1.75	3.56	2.13	3.51	2.11
83	R-605 Calmness	3.74	2.41	2.55	1.89	3.65	2.39	4.11	2.51	2.62	1.95	4.05	2.51	3.86	2.46
84	R-606 Tidiness	4.89	2.71	3.50	2.29	4.79	2.70	5.91	2.71	4.25	2.49	5.84	2.72	5.34	2.76
85	R-607 Culture	4.37	2.26	3.50	2.13	4.30	2.26	5.54	2.27	4.07	2.26	5.48	2.28	4.92	2.35
86	R-608 Leadership	1.16	1.28	1.40	1.28	1.18	1.28	1.29	1.35	1.09	1.04	1.28	1.34	1.23	1.31
87	R-609 Self-Confidence	4.85	2.35	3.59	1.85	4.75	2.34	4.97	2.50	3.96	2.14	4.93	2.49	4.85	2.42
88	R-610 Mature Personal.	10.16	5.14	7.82	4.08	9.98	5.10	10.90	5.13	8.10	4.13	10.79	5.12	10.40	5.13
	Interest Inventory Scales														
89	R-701 Phys. Science	48.42	12.74	49.20	12.14	48.48	12.70	61.06	11.39	58.04	10.72	60.94	11.38	54.98	13.54
90	R-702 Bio.Sci & Med	25.18	7.06	25.64	6.38	25.22	7.01	26.90	7.57	27.89	5.75	26.94	7.50	26.12	7.32
91	R-703 Public Service	35.94	12.28	34.26	11.22	35.81	12.20	41.83	11.71	37.87	10.70	41.67	11.69	38.87	12.29
92	R-704 Lit-Linguistic	53.61	11.63	50.34	11.41	53.36	11.64	49.07	13.29	48.79	10.86	49.06	13.20	51.11	12.66
93	R-705 Social Service	40.55	8.15	37.77	8.53	40.33	8.21	32.14	8.26	33.25	7.50	32.18	8.23	36.08	9.18
94	R-706 Artistic	23.75	6.02	22.54	5.25	23.66	5.97	21.00	6.61	22.52	5.32	21.06	6.57	22.30	6.42
95	R-707 Musical	18.27	4.92	16.70	4.12	18.15	4.88	16.17	5.46	15.12	4.22	16.13	5.42	17.09	5.26
96	R-708 Sports	19.97	6.88	22.02	6.38	20.13	6.86	25.40	7.12	25.50	5.58	25.40	7.06	22.88	7.45
97	R-709 Outdr Recrea.	7.15	3.01	7.88	2.79	7.21	3.00	10.68	3.26	10.21	2.78	10.66	3.24	9.01	3.57
98	R-710 Bus-Mangmt.	44.22	9.88	42.78	9.93	44.11	9.89	47.53	9.90	44.29	8.81	47.40	9.88	45.83	10.02
99	R-711 Sales	20.22	5.05	19.22	4.96	20.14	5.04	21.94	4.96	20.37	4.42	21.88	4.95	21.05	5.07
100	R-712 Computation	33.91	7.42	32.51	7.57	33.80	7.44	35.04	7.25	33.44	7.04	34.97	7.25	34.41	7.36
101	R-713 Office Work	26.21	5.23	23.20	5.79	25.98	5.34	20.93	5.84	20.48	4.69	20.91	5.80	23.33	6.13
102	R-714 Mech-Tech	48.13	11.36	44.16	10.46	47.82	11.34	64.10	8.89	57.09	9.91	63.81	9.04	56.17	12.96
103	R-715 Skilled Trades	64.50	11.39	58.11	11.91	64.01	11.55	70.46	9.80	64.10	11.75	70.20	9.96	67.24	11.19
104	R-716 Farming	20.98	6.71	19.92	5.64	20.90	6.64	25.41	6.22	24.32	5.18	25.37	6.19	23.23	6.78
105	R-717 Labor	38.82	6.37	33.96	6.95	38.44	6.54	41.46	5.85	36.68	6.58	41.27	5.95	39.92	6.40
	A Priori Composite														
106	C-001 IQ Composite	158.01	54.19	78.83	35.84	151.88	57.07	158.50	52.44	75.82	28.71	155.12	54.21	153.57	55.61
107	C-002 Gen.Acad.Apt.	471.22	123.22	277.43	82.75	456.22	131.22	482.89	114.10	280.64	76.58	474.63	119.69	465.83	125.67
108	C-003 Verbal	105.26	22.32	66.76	19.91	102.28	24.42	109.94	20.83	68.75	18.68	108.26	22.28	105.40	23.52
109	C-004 Quantitative	93.95	39.15	50.04	17.18	90.56	39.68	86.69	35.11	45.02	16.08	84.98	35.51	87.65	37.66
110	C-005 Technical	51.78	16.38	27.98	11.40	49.94	17.27	35.54	11.58	20.88	7.06	34.94	11.79	42.11	16.47
111	C-006 Scientific Apt.	432.59	137.47	226.59	79.81	416.64	144.77	375.19	118.22	195.60	57.20	367.86	121.66	391.18	135.41

*Cases not weighted.

** See footnote on page A-15.

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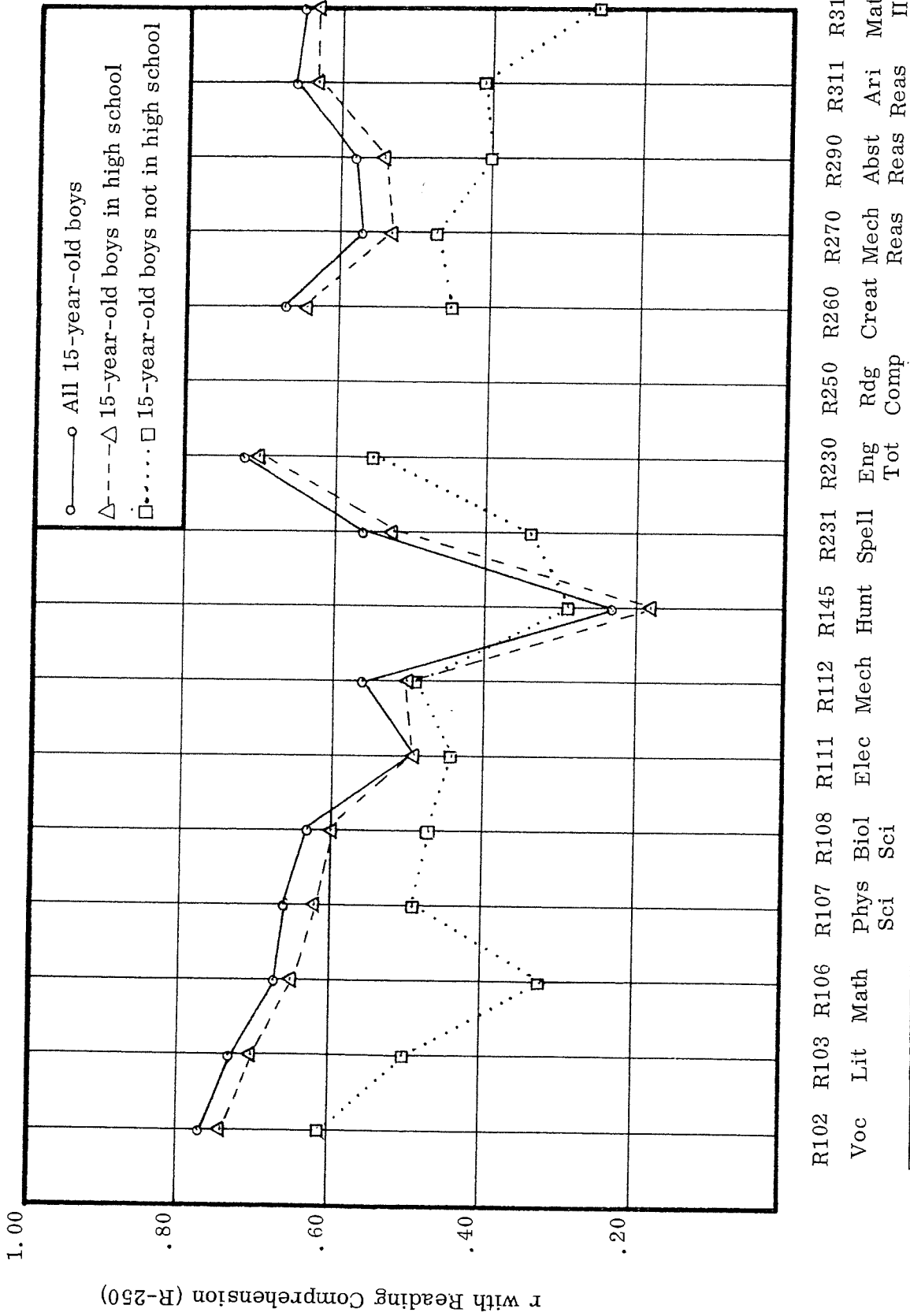
Figure V-1. Correlation of Reading Comprehension (R-250) score with each of 16 other Project Talent Variables: for 15-year-old boys.

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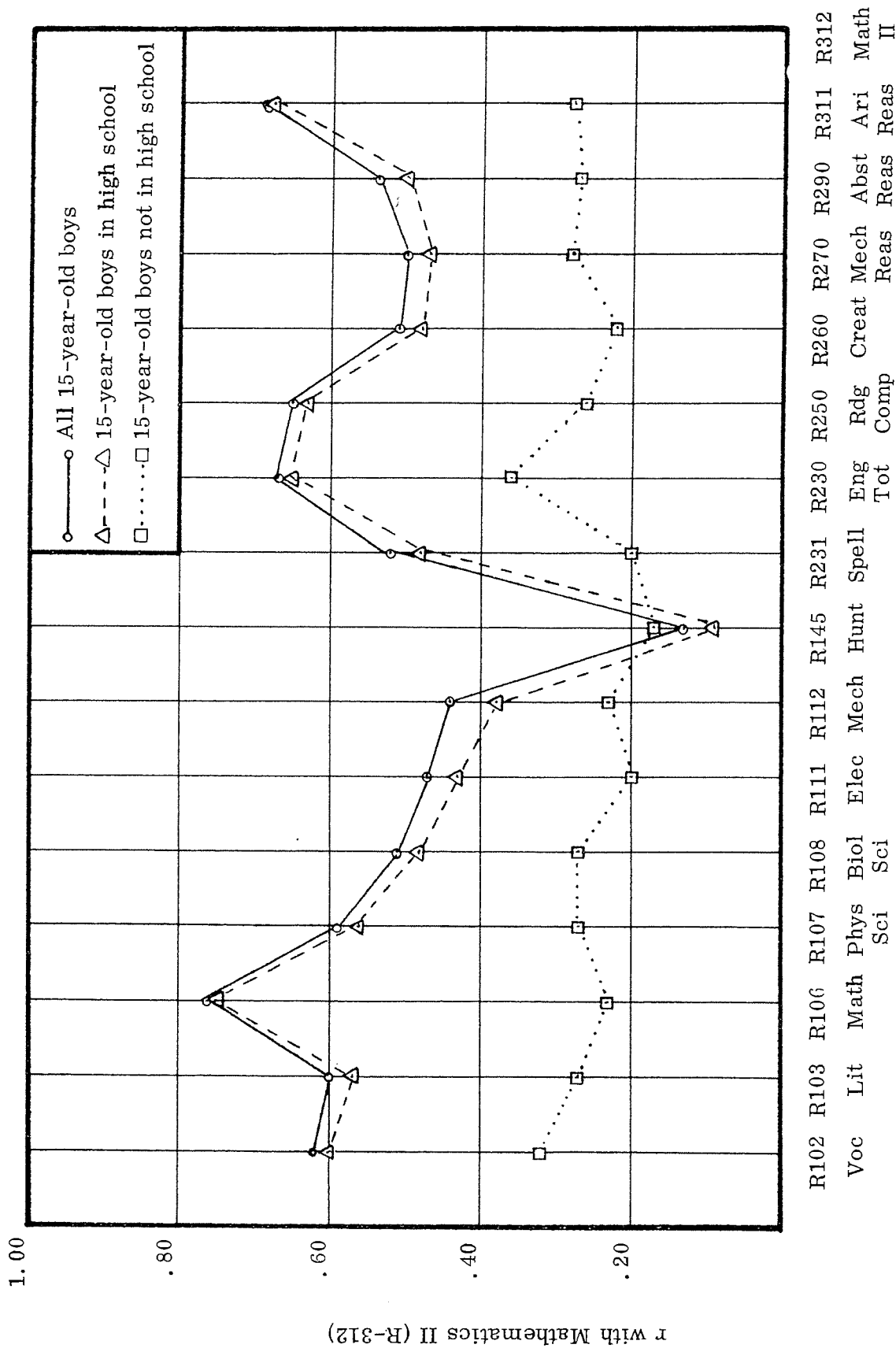
Figure V-2. Correlation of Mathematics Part II (R-312) score with each of 16 other Project Talent Variables: for 15-year-old boys.
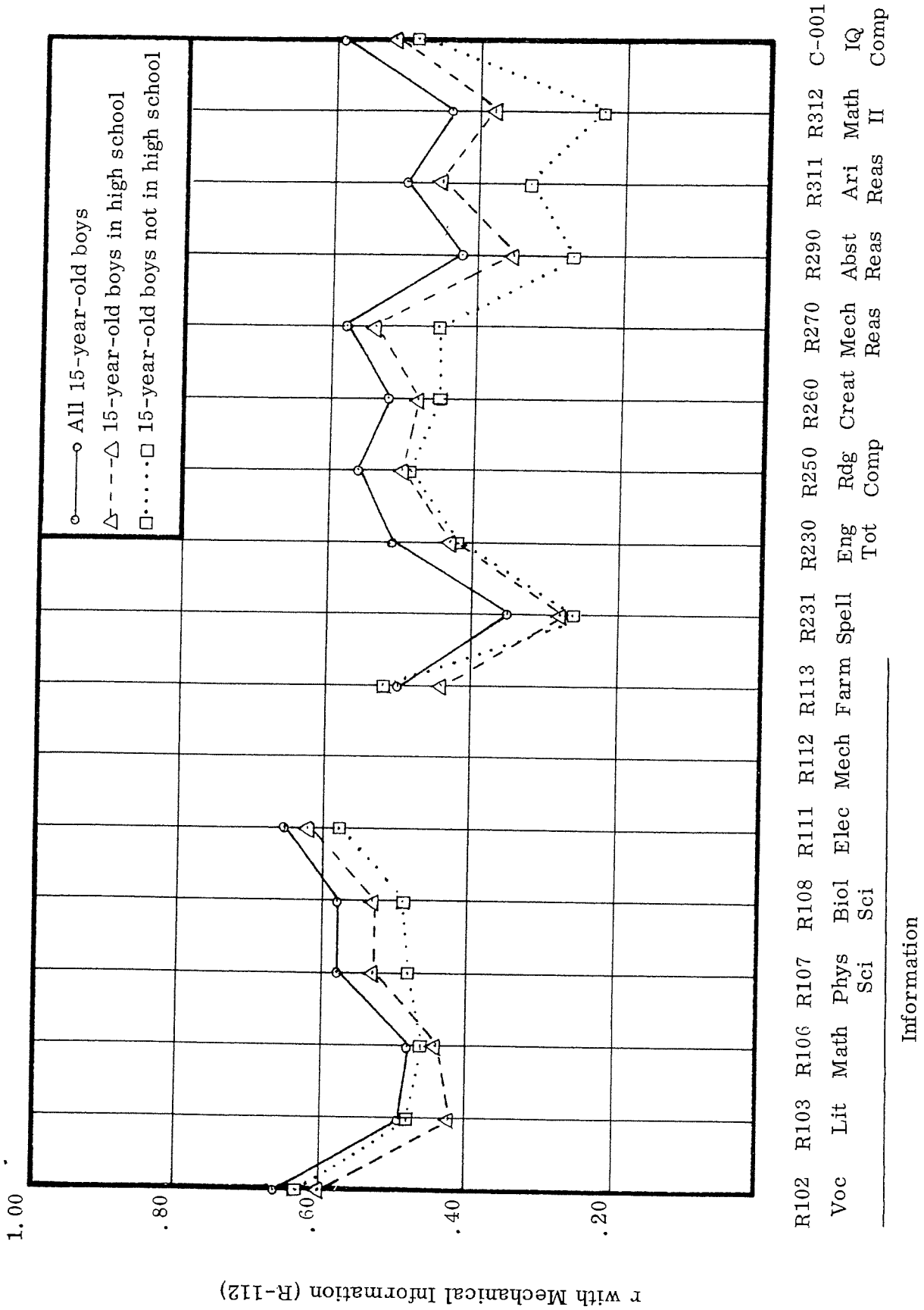
Figure V-3. Correlation of Mechanical Information (R-112) score with each of 17 other Project Talent Variables: for 15-year-old boys.

but they are not likely to learn Grade 9 mathematics, which is what most of Part II of the Mathematics Test is based on. Thus, since most of the scores on Mathematics Part II for the non-high-school cases are concentrated at the low end of the scale, the range is quite restricted, with a corresponding shrinkage in correlations involving this variable.

Mechanical Information scores, on the other hand, are far less dependent on secondary school instruction than are scores in either Mathematics Part II or Reading Comprehension. Consequently, as is apparent from Figure V-3, there is far less discrepancy between the correlations for high school cases and non-high-school cases when one of the variables correlated is Mechanical Information score than there is for either of the other two measures (Reading Comprehension and Mathematics Part II).

Table V-5 provides data that support this hypothesis as to why the correlations are lower on the whole for the non-high-school group than for the high school students. It is clear from Table V-5, and in accordance with reasonable expectation as well, that the 15-year-olds not in high school score very much lower on the tests than do those students of the same age who are in high school (most of whom are in Grade 10).

C. Normative Data on Test Scores

Appendix C presents percentiles, means, and standard deviations for 52 test variables separately for 15-year-old boys, 15-year-old girls, and all 15-year-olds combined. Means and standard deviations are also presented for an additional 22 variables. These norms in Appendix C are based on all 15-year-olds in the regular sample for Grades 9-12, supplemented by those in the special sample of 15-year-olds not in high school. Weighted distributions were obtained, (using Weight D*) to get an estimate of what the distribution would be for the complete population of 15-year-olds in the United States. It is these weighted distributions that the statistics presented in Appendix C are based on. The 52 variables for which percentiles are presented may be summarized as follows:

Variables	Code Designation for Variable	No. of Scores
Information Part I: scales	R-101 -- R-115	15
Information scales (other)	R-131,R-139,R-142,R-162,R-172	5
Information Part I Total	R-190	1
English Test	R-230 -- R-235	6
Miscellaneous verbal abilities	R-211,R-212,R-220,R-240,R-250	5
Other special aptitudes	R-260,R-270,R-281,R-282,R-290	5
Mathematics Test	R-311,R-312,R-320,R-333,R-340	5
Arithmetic Computation	F-410	1
Tests of perceptual speed and accuracy	F-420,F-430,F-440	3
Speed of decision-making (preferences)	A-500	1
A priori composite scores**	C-001 -- C-005	5
	TOTAL	52

*Described in Chapter II, Section C
**The a priori composite scores that are mentioned in this report are described in Appendix A, Part 4.

Inspection of the norms for these 52 variables not only throws light on the abilities of 15-year-olds but also, quite incidentally, shows that the TALENT battery is useful for this purpose, in that its tests provide adequate "ceiling" and "floor" for the general group, except in the case of those few tests whose special purposes dictate that the ceiling or floor should be appropriate for a special subgroup. These exceptions include the Screening scale of the Information Test, Mathematics Part III, and the Aeronautics and Space scale of the Information Test.

The Screening scale has a very low ceiling because of its special purposes*, which require that all its items be extremely easy, so that almost anyone who is neither mentally retarded nor illiterate would be able to answer all of them correctly. And as is apparent from Table V-5, the Screening scale does meet this standard. The average 15-year-old high school student gets a nearly perfect score while the average score for 15-year-olds not in high school is far lower.

Part III of the Mathematics Test was intended primarily for that somewhat select group of high school students who take college-preparatory mathematics courses beyond the ninth grade. Because of this special purpose the test is useful mostly for this group, and does not have the extremely easy items that would be necessary to differentiate among that unfortunately large segment of the high school population that lacks interest, training, and ability in any mathematics beyond the eighth- or ninth-grade level.

The Aeronautics and Space scale was one of the scales that was expected to be primarily useful for boys and of only negligible importance for the vast majority of girls, who could be surmised to have a massive degree of indifference to the area, and lack of information in it. The data turned out just that way. The scale differentiates effectively among boys at all percentile levels and has enough easy items to distinguish among girls in roughly the top half or two-thirds. (The bottom third of the girls score at just about the chance level.)

D. Relation Between Grade Placement and Performance on Selected Tests.

In Table V-4, which shows the intercorrelations for a 10 per cent sample of the combined 15-year-olds (boys and girls, in school and not in school), the correlations of the various tests with grade placement are revealing, although because most of the 15-year-old students are in either Grade 9 or 10, the variance in grade is quite slight. The following are the variables that have correlations of at least .35 with grade:

(R-101) Screening
(R-103) Literature Information
(R-133) Health Information
(R-190) Information Part I Total
(R-192) Information Part II Total
(R-100) Information I + II Total

(R-230) English Total
(R-250) Reading Comprehension

(C-001)**IQ Composite
(C-002)**General Academic Composite
(C-003)**Verbal Composite
(C-006)**Scientific Aptitude Composite

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*The purposes of the Screening scale are described in **Designing the Study** (Flanagan, et al., op. cit.)

These are **a priori composites. They are defined in Appendix A, Part 4.

The highest correlation, .432, is with the Verbal Composite (C-003). This is in line with the observation made in Chapter IV, to the effect that performance in some of the verbal areas (notably Reading Comprehension) is closely related to scholastic acceleration and is also related to scholastic retardation.

Table V-6 shows means and standard deviations on 18 tests for 15-year-olds classified by grade and sex. The 18 test variables in these tables are the same ones that were discussed in Chapter IV. The means and standard deviations for 15-year-old boys, 15-year-old girls, and all 15-year-olds, are shown in Table IV-5, which presents data comparable to that in Table V-6 except that in Table IV-5 the 15-year-olds are not classified by grade. Fifteen-year-old students in different grades are quite different in terms of test performance. In general, the higher the grade the higher the average test score. The gradient is especially steep for the Reading Comprehension and Mathematics Achievement tests.

E. Sex Differences in Patterns of Aptitudes and Abilities

Inspection of the means in Table V-6 and the percentile norms presented in Appendix D makes it apparent that the fact that the girls in a given grade tend to be slightly younger than the boys does not account for all of the difference between boys and girls in regard to mean aptitude level at different grades, although it does probably account for a small portion of the difference.

The point biserial correlations of the various tests with sex (positive r indicating high scores for females, negative r indicating high scores for males) that are shown in Table V-4 for the total group of 15-year-olds are high and sharply structured. They show essentially the same pattern that occurs for any mixed group at the high school and near-high-school levels for these tests. The following correlations, abstracted from Table V-4, are typical:

		r with sex
R-110	Aeronautical and Space (Information)	-.41
R-111	Electricity and Electronics (Information)	-.42
R-112	Mechanics (Information)	-.52
R-114	Home Economics (Information)	.51
R-115	Sports (Information)	-.37
R-104	Colors (Information)	.25
R-145	Hunting (Information)	-.42
R-146	Fishing (Information)	-.28
R-147	Other Outdoor Activities (Information)	-.13
R-270	Mechanical Reasoning	-.40
R-602	Social Sensitivity (S.A.I.)	.24

Table V-6 Estimated* Means and Standard Deviations on 18 Selected Project TALENT Tests
For 15-Year-Olds Classified by Grade** and Sex

Test	No.of Items	Sex	Raw Score Mean*						Standard Deviation*					
			Gr. 7	Gr. 8	Gr. 9	Gr. 10	Gr. 11	Gr. 12	Gr. 7	Gr. 8	Gr. 9	Gr. 10	Gr. 11	Gr. 12
R-102 Vocab.Info.Part I	21	M	4.66	6.62	10.75	13.02	14.18	16.24	2.47	3.41	3.99	3.71	4.08	3.51
		F	3.90	5.31	9.47	11.51	12.49	12.16	1.64	2.49	3.86	3.94	4.31	4.26
R-105 Soc.Studies Info.	24	M	4.64	7.48	12.51	15.36	17.29	20.23	2.27	4.35	5.51	5.10	5.22	3.40
		F	4.34	6.46	10.84	12.88	14.70	14.80	2.42	3.56	4.92	4.86	5.37	5.25
R-107 Phy. Sci. Info.	18	M	3.93	4.85	8.38	9.57	10.81	13.55	1.92	2.82	3.81	3.79	4.40	3.79
		F	3.15	3.86	6.70	7.13	7.51	6.70	2.06	2.01	3.46	3.50	4.02	4.23
R-108 Biol. Sci. Info.	11	M	2.62	3.55	5.23	6.71	6.91	7.50	1.78	1.89	2.38	2.29	2.31	1.76
		F	2.64	2.91	4.39	5.74	5.92	5.41	1.31	1.65	2.18	2.25	2.26	2.63
R-111 Elec. Info.	20	M	3.88	4.63	7.87	9.09	9.92	11.59	1.79	2.60	3.94	4.12	4.61	4.62
		F	2.79	4.09	5.14	5.36	5.27	5.61	1.52	2.03	2.57	2.49	2.60	2.77
R-112 Med. Info.	19	M	5.08	7.12	10.38	11.93	12.01	12.65	2.56	3.38	3.64	3.27	3.32	3.02
		F	3.54	5.03	6.65	7.48	7.48	6.18	2.13	2.59	2.81	2.86	2.94	3.23
R-114 Home Ec. Info.	21	M	4.12	5.28	7.22	8.33	8.71	9.50	2.30	2.53	2.84	2.84	2.86	2.42
		F	6.15	6.66	10.96	12.32	12.32	10.76	2.81	2.99	3.46	3.25	3.30	3.40
R-115 Sports Info.	14	M	2.92	4.05	6.72	8.21	8.63	10.15	1.61	2.35	2.98	2.89	3.07	2.56
		F	2.54	3.23	4.61	5.52	5.34	4.86	1.29	1.88	2.34	2.40	2.48	2.50
R-190 Info.Part I Total	252	M	59.82	76.33	116.90	140.36	152.92	175.86	18.42	28.65	36.28	34.57	39.96	32.54
		F	56.62	69.43	104.35	121.29	128.87	123.27	19.35	21.35	30.99	31.14	36.39	41.82
R-230 English Total	113	M	50.95	53.71	70.62	79.20	82.92	93.02	12.59	15.79	***	***	14.82	10.75
		F	54.91	57.44	77.36	84.42	87.61	88.33	12.48	15.57	***	***	12.63	12.26
R-250 Rdg. Comprehension	48	M	10.21	13.44	23.34	29.92	33.38	40.86	4.77	7.64	10.82	10.41	10.71	6.14
		F	11.68	14.20	24.70	30.40	33.39	31.57	5.23	6.95	10.30	9.82	10.52	11.57
R-260 Creativity	20	M	4.78	4.94	7.40	9.08	10.08	11.36	2.14	2.92	3.77	3.99	4.36	4.69
		F	3.72	4.33	6.91	8.23	8.75	8.48	1.52	2.41	3.47	3.63	4.02	4.64
R-270 Mech. Reasoning	20	M	6.36	7.71	11.16	12.55	12.63	14.20	2.92	3.55	4.08	3.97	4.27	3.90
		F	4.74	5.22	7.64	8.58	8.62	8.21	2.27	2.38	3.35	3.49	3.61	4.13
R-282 Vis. in 3 Dimen.	16	M	6.14	6.14	8.08	9.04	9.26	10.55	3.16	2.78	3.28	3.33	3.30	3.73
		F	5.35	5.05	7.24	7.99	8.00	7.77	2.27	2.19	2.88	3.00	3.13	3.20
R-290 Abstract Reas.	15	M	4.70	5.11	7.96	9.15	9.68	10.83	3.46	2.99	3.15	2.87	3.02	2.54
		F	4.72	4.49	7.67	8.81	9.25	8.97	2.00	2.47	3.17	2.93	2.97	3.64
R-311 Math I	16	M	4.29	4.43	7.10	8.68	9.60	12.09	1.84	2.46	3.36	3.40	3.68	2.76
		F	3.21	3.99	6.70	7.96	8.61	8.85	1.81	2.14	3.26	3.38	3.68	3.36
R-312 Math II	24	M	5.78	5.53	8.82	11.00	13.22	17.08	2.56	2.44	4.00	4.56	5.81	5.90
		F	4.78	5.10	8.79	10.23	11.24	12.27	2.23	2.48	3.81	4.21	5.31	5.97
F-410 Arith.Computation	72	M	12.54	3.00	18.60	26.25	29.58	36.89	48.30	35.78	***	***	19.95	13.00
		F	12.05	.14	24.99	30.40	31.60	29.21	53.08	32.36	***	***	***	22.40

Note:- The numbers of cases on which the means and standard deviations in this table are based are
shown in Table V-1.

*These estimates are weighted means and standard deviations based on all 15-year-olds in the
Project TALENT probability sample. Weight D (described in Chapter II, Section C) was used,
so that the resultant means and standard deviations are estimates of what they would be for
corresponding segments of the total 15-year-old population.

**The means and standard deviations for 15-year-olds in Grade 6 and below and for those not in
school are omitted from this table because the numbers of cases are too small.

***Data not available.

Several of the Interest Inventory scales have appreciable correlations with sex. For instance:

		r with sex*
R-701	Physical Science Interest	-.46
R-705	Social Service Interest	.44
R-708	Sports Interest	-.35
R-709	Outdoor Recreation Interest	-.48
R-713	Office Work Interest	.41
R-714	Mechanical-Technical Interest	-.62

The correlation for Mechanical-Technical Interest (r= -.62) is the highest correlation with sex found in the entire matrix. Among the six composite scores, only one--the Technical composite (C-005)--correlated over .20 with sex. Its correlation was -.46, indicating higher scores for the boys.

F. Student Background Factors

For 100 items in the Student Information Blank, weighted percentage distributions of responses by grade and sex for all 15-year-old students in the Project TALENT probability sample are presented in Appendix D. Weight D was used, so that the resultant distributions are approximations of the percentage distributions for corresponding segments of the national population of 15-year-olds. The 100 SIB items are ones that were selected because results for them in prior analyses made further analysis appear worthwhile.

The Student Information Blank was designed for high school students. Therefore poor readers, seriously below Grade 9 level in reading comprehension, may be giving invalid responses in some cases. Examination of the patterns of results on the various items, however, indicates that the proportion of random-appearing responses is fairly small even for those below Grade 8 or not in school. For example, very few of them indicated that their fathers were in white collar occupations. Thus, while the substantial positive correlations of the test scores of the 15-year-olds with their grade placement may account for a part of the correlation between Student Information Blank responses and grade placement, it seems probable that they do not account for all of it.

Much, though not all, of the discussion that follows is based on the assumption that grade placement of students who are all the same age (e.g., 15) is correlated to some degree with their scholastic performance. The data of Chapter IV support this assumption. It is recognized, of course, that the correlation is far from perfect. The

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*Note that the signs of these correlations are the opposite of those in Table V-4. The signs in Tables V-2 to V-4 are misleading for the Interest Inventory variables because in the computation of these correlations the Interest Inventory scales were oriented backwards (high scores representing lack of interest).

relationship is attenuated by the effects of the "100-per-cent-promotion" policy that has been in effect in some school systems, "social promotions", the prevalence of a policy against the acceleration of bright students, wide differences among schools in type of student body, and consequently in standards, and other factors which have tended to increase the homogeneity in chronological age within a grade, by making the group more heterogeneous in achievement level. The fact that schools differ widely in the extent to which these resistances to grade placement strictly on the basis of achievement prevail serves only to complicate the situation. But despite this recognized defect of grade placement as an index of achievement level, and thus, indirectly as an index of scholastic ability level of 15-year-olds, there is still sufficient correlation between achievement level and grade placement that the latter has considerable utility as an index of the former. This being the case, when the relation of grade placement to responses to a particular SIB item is examined, implicit in the discussion that follows is the assumption that whatever relationship is found is quite likely to be a useful, though somewhat attenuated, indication of the correlation between the SIB responses and scholastic achievement level.

1. Reading activities and study habits

There appears to be little relation between number of books reported to have been read (SIB Item 56) and grade placement of the 15-year-olds. The girls, particularly those in high school, report reading more books than do the boys. But the modal response for both boys and girls is still only one to five books per year. This is true at all grade levels.

Responses to some of the SIB items on study habits also show a relationship in the expected direction, though a slight one, with grade placement.

Among these items showing a relationship to grade placement are the following ones (for which the options range from "Almost always" to "Almost never"):

66. I have a difficult time expressing myself in written reports, examinations, and assignments.

70. I seem to accomplish very little compared to the amount of time I spend studying.

77. My teachers have criticized me for turning in a sloppy assignment.

81. I get behind in my school assignments.

82. My grades on written examinations or reports have been lowered because of careless errors in spelling, grammar, or punctuation.

2. Course grades

The students' reports of their grades (Items 106-113) also show some relationship to grade placement, at the high school level (Grades 9-12). The magnitude of the relationship is greater in the academic

areas than in vocational courses. However in most areas the relationship between grade placement and self-report of grades received seems to break down below Grade 9. The students in Grade 8 and below report grades that are about as high as those reported by the Grade 9 students.

3. Health and related factors

In regard to the student's usual health in the past three years (Item 243), there is a tendency for those in the higher grades to report better health. They also tend to report slightly less illness during the previous year (Item 241). Responses to questions on eyesight (Items 248-250) show no relationship to grade placement. However, there may be some sex differences in the responses to these questions. Wearing glasses at all times (Item 248) is reported by a few per cent more girls than boys. Wearing glasses for special purposes (Item 250) is reported by far more girls than boys (27 per cent and 31 per cent of ninth- and tenth-grade girls respectively, and only 17 per cent and 18 per cent, respectively of the boys). Furthermore, fewer boys reported having any trouble seeing at a distance (Item 249) than girls. The percentages of Grade 9 and Grade 10 students reporting this difficulty were 35 per cent and 36 per cent respectively for girls, and only 22 per cent and 23 per cent for boys.

In response to Item 255 ("Is your speech easily understood?"), the higher the grade placement the more likely the student is to answer affirmatively. There seems to be quite a marked relationship (not necessarily causal) between speech handicaps and academic retardation.

4. Family and home background

Responses to the SIB items on the value of the home (Items 171-172) do not show much relationship to grade placement, nor do the responses to items on family income (Items 173-174). About 40 per cent of the students either say that they are unable to estimate the family income or omit the item. Neither the item on the value of the home nor the one on family income seems to be particularly useful as a socio-economic variable. However, responses to the item on occupation of the father (Item 206) show a pronounced relationship to grade placement, as do the responses to the items on education of the father (Item 218) and education of the mother (Item 219). It would appear that father's occupation plus mother's education would give a very satisfactory index of socio-economic status, and that it would not be necessary to use any other items to supplement these two for that purpose. Likewise, father's occupation by itself has been found to be very useful as a socio-economic indicator. Responses to some of the items on articles in the home (Items 191, 193) also show a definite relationship to grade placement.

It appears from the responses to Item 220 that a considerably larger proportion of the 15-year-olds in high school come from homes not broken by divorce, or by death of a parent, than do those still in elementary school or those not in school at all.

Number of children in the family (Item 221) is negatively correlated with grade placement, as is number of people living in the home (Item 226).

5. Plans for education

Two items (Items 297 and 304) provide information on whether the student expects to graduate from high school. Item 297 asks, "Do you think you will quit high school before you graduate?" and Item 304, which asks "What is the greatest amount of education you expect to have...?" has as Option 1, "I don't expect to finish high school". Responses to both items show a relationship, in the expected direction, to grade placement. The percentages of students that expect not to graduate are quite small for the 15-year-olds in Grade 9 or above, but they take a big jump for the students in Grade 8 and below. As has been shown in other of the analyses, there is very little dropout among those who are within the normal two-year age span for the grade or are younger. Most of the dropouts are those who are old for their grade. The dropout expectation for those 15-year-olds who are in Grade 8 or lower is far higher than for those who are in high school. As one 15-year-old girl in the eighth grade wrote in her theme on "What High School Means to Me": "It doesn't mean very much because I am afraid I will never get there."

Responses to Item 301, which is concerned with whether the student plans to attend college, show a definite relationship to grade placement. This relationship is greatly sharpened by Item 302, which differentiates between plans to attend a four-year college and plans to attend junior college. For four-year college there is a very close relationship to grade placement, while for junior college the relationship is virtually non-existent for girls and actually negative for boys, since the proportion of eighth-grade 15-year-olds who say they are likely to go to junior college is about twice as great as the proportion in Grade 9 and above.

For Item 303 ("When do you plan to start college?"), choice of Option 2 ("...right after high school") shows a pronounced positive correlation with grade placement, both for boys and for girls. The other options, e.g., Option 1 ("I don't plan to go..."), Option 4 ("...after I have worked a few years"), Option 5 ("...my plans are not definite"), and Option 3 ("...after completing military service") show a negative relation to grade placement.

Item 304, like the other items on educational plans, shows that the higher the grade placement of the 15-year-olds the more education they tend to expect to have. Furthermore, the higher the grade placement of the 15-year-old, the more willing he is to borrow money to go to

college (Item 306). Item 337 asks how much education the parents want the student to have. Responses to this item correlate fairly well with grade placement for the boys, but not for the girls. When the distribution of responses to this item is compared with that for Item 304, which asks the student how much education he expects to have, it is seen that more students expect to drop out of high school without graduating than report they have parents who do not care whether they stay in school or not. Likewise, fewer students expect to graduate from college than say they have parents who want them to. But more students plan to get graduate degrees than have parents who expect them to. Nevertheless, there is some degree of correspondence between the expectations of the parents and the expectations of the students.

6. Occupational plans and related educational plans

Responses to the items on occupational and educational plans (Items 210-212) indicate high relationships in many areas to grade placement. For instance, planning to major in education and planning to be a teacher are positively correlated with grade placement for girls but not for boys. Apparently, teaching tends to attract the brighter girls but just average boys. Furthermore, far fewer boys than girls express an interest in this area. The boys above modal grade for age tend mostly to plan to go into engineering, physical science, medicine, and law (Item 211). Engineering, unlike the other professions, is a popular goal among 15-year-old boys at all grade levels.

Responses to the item on type of college the student plans to attend (Item 237) show considerable relationship to grade placement. As would be expected, choice of Option 1, "I do not expect to go to college", is negatively related to grade placement, as is choice of Option 9, "I have no plans regarding the type of college I will attend". The attractiveness of teachers colleges to boys is negatively related to their grade placement, but it is positively related to the grade placement of girls. This is in line with the previously mentioned findings about the attractiveness of teaching as a profession to the brighter girls and its lack of attractiveness to the brighter boys. Boys in Grades 9 and 10 heavily prefer engineering college to liberal arts college, whereas almost as many of the Grade 11 15-year-olds lean towards liberal arts college as towards engineering college, and those in Grade 12 heavily prefer liberal arts college to engineering college. The same pattern is true regarding university versus a liberal arts college. The type of college most favored by boys in Grades 9 and 10 is engineering college. "University" is the choice favored (by a small margin) by those in Grade 11, and liberal arts college is overwhelmingly the most popular choice for those in Grade 12.

Among the girls, the most popular responses for the 15-year-olds in Grade 9 are "some other type of college" or "no plans regarding type"; for those in Grade 10, "some other type of college"; for

Grade 11, "university"; and for Grade 12, the modal response of the girls, like that of the boys, is "liberal arts college".

Agricultural college and colleges specializing in fine arts or music show negative relationships with grade placement. It is the liberal arts college that has the most positive pronounced relationship for the boys. Choice of engineering college also positively correlated with grade placement, but the relationship is far less pronounced. If Options 4, 5, and 7 (engineering college, liberal arts college, and university) are combined, the gradient representing the relationship with grade placement is very steep indeed. For boys it ranges from 26.3 per cent in the eighth grade to 71.5 per cent in the twelfth grade. For girls it is slightly less pronounced, since engineering school draws fewer girls.

7. <u>Plans for military service</u>

Item 232 asks the boys what they expect to do about military service, and then gives a choice of 12 options. Three-fourths of the 15-year-old boys indicate they have made up their minds on this question. Of this group, boys in the two modal grades favor enlisting right after high school, with a greater tendency towards this choice among the ninth-graders than the tenth-graders. A little over ten per cent of them say that they would work for a commission through a college program. The next largest group favors enlisting right after college. Students in the higher grades seem almost as likely to say they plan to enlist as those in lower grades. The chief differences are that a greater proportion in the higher grades than in the lower grades plan to enlist later, after college. It is interesting to note that the experience of the armed forces has been that these students rarely enlist after college, but instead are either voluntarily inducted when drafting is imminent, or are drafted. Presumably, those boys in the sixth, seventh, and eighth grades who answered this question with "Never serve because I am a girl" did not understand the question, or did not read beyond the first two words.

Item 235 asks "In which branch of the service do you expect to serve?" There is a slight tendency for the Army to be more popular with 15-year-olds in the higher grades than with those in lower grades. For the Marine Corps, the trend is reversed. For the Air Force and Navy, the relationship with grade placement is less clear. At all high school grade levels (Grades 9-12),however, Army, Navy, and Air Force all seem to outstrip the Marine Corps in popularity among 15-year-olds. Items 342-346 use a different approach in determining the relative popularity of the various branches of the armed forces. On the basis of the resultant means, the Air Force appears to be most popular, although its margin over the Navy is not large.

The girls' choices for Item 235, outside the two "I do not expect to serve..." options, do not exceed 15 per cent, except below the ninth grade. The most popular choice among the 15-year-old high school girls is the Navy, by a rather slight margin over the Air Force.

As far as motivation of the boys for a _permanent_ military career is concerned, it appears to be negatively related to grade placement. This is indicated by the responses to Items 339 and 340. The modal response of the boys to Item 339 at all high school grade levels (Grades 9-12) was "Dislike very much", and the higher the grade placement the larger the percentage making this choice.

8. Other plans and expectations: marital, financial, etc.

Responses to Item 238 indicate, not too surprisingly, that the boys expect to marry at a later age than do the girls. The number of children expected (Item 362) does not bear much relationship to grade placement, but the girls apparently expect more children, on the average, than the boys do.

SIB Item 239 asks boys and girls how much money per year they would expect to be earning 20 years after graduating from high school. Responses to this question involving expected earnings are affected by most high school students' lack of actual experience with salaries. The same factors that cause lack of ability to estimate family income (Item 173) also result in some unrealistic response here. The lack of familiarity with income is reflected in the numbers of omits on Items 239 and 240, which run from 23 per cent and 22 per cent for ninth-grade boys and girls respectively, to 12 per cent and 22 per cent for 12th grade boys and girls respectively. However, the boys' means on Item 239 (expected earnings) do seem to have a slight positive correlation with grade placement. The relationship is most noticeable in the case of Option 11 ("$25,000 or more") and Option 1 ("$2,500 or less"). Choice of Option 11 is positively related to grade placement in the case of boys, apart from the fact that it is the very unrealistic modal response of the small group of boys in Grade 6 and below. Choice of Option 1 is negatively related to grade placement, in the case of the boys. For the girls, the picture is somewhat less clear cut, because of the substantial proportion of girls at all grade levels who expect to be housewives and, therefore choose Option 1 ("$2,500 or less").

The same observations apply to Item 240, "/What/ is the _least_ amount of earnings that would satisfy you...?" as far as the unrealistic- ness of estimates of income is concerned. Both boys and girls in high school give a lower estimate for amount of earnings that would be satisfactory than for expected earnings.

Both boys and girls set their sights lower than their expectations. The level of financial success they say they _hope_ to achieve (Item 363) is not as high as that they _expect_ to achieve (Item 364). Both boys and girls regard it as important for the head of a family to have life insurance (Item 365). The degree of importance attached to it is correlated with grade placement, especially in the case of the boys. Also correlated with grade placement are the amounts that the boys expect to invest in life insurance (Item 366)

and in savings accounts (Item 367). Plans for investing in stocks and bonds (Item 368) show no gradient with grade placement, and for real estate investments other than one's own home (Item 369), the correlation with grade placement appears to be negative. This is probably an artifact, however, due to the fact that the boys in the higher grades plan to put a smaller percentage of their savings in real estate than in certain other forms of investment, whereas the boys at the lower grade levels may be less capable of these niceties of distinction, and therefore tend to mark roughly the same option (e.g., "up to an amount equal to three months' salary") for all items in this series (Items 367-369).

Students in the higher grades expect that the ratio of their cash purchases to their credit purchases will be higher than do students in the lower grades (Item 370). This is particularly true in the case of the boys. Boys at the higher grade levels also report saving slightly more of their income than do boys at the lower grade levels (Item 371). No such gradient is apparent for the girls. Neither the boys nor the girls appear to expect to change their present practices on savings during the first five years after they start to earn a living (Item 372). For both boys and girls, the typical response to both Item 371 (amount being saved) and Item 372 (expected policy on savings) appears to be about halfway between "I /expect to/ save a definite amount and spend whatever remains", and "I /expect to/ save whatever remains after I have bought most of the things I want".

In regard to the purposes of saving currently (Item 373) and after completing their education (Item 374), current savings are reported to be mostly for college or a car in the case of the boys, and for college in the case of the girls, while future savings are expected to be mostly for marriage and family, in the case of both boys and girls.

9. Attitudes and values

Items 350-361 seek to find out what job features are regarded as most important. Thus the responses throw some light on the students' attitudes and values. Most of the job features that are investigated in these items (e.g., good pay, job security, work that seems important, interesting work, freedom to make one's own decisions, opportunity for advancement, congenial co-workers, good supervisor) turn out to be regarded as of considerable importance, e.g., somewhere between Option 3 ("Important") and Option 2 ("Very Important"). Not too surprisingly, major differences are apparent between the boys' attitudes and the girls' in regard to the relative importance of various desirable features. These differences are undoubtedly due, at least partly, to the fact that many girls regard a job not as a career or as a necessity, but rather as a fill-in before marriage; as a way of supplementing a husband's income after marriage, in order to raise the standard of living; or as a way of passing time more enjoyably and profitably than in housework. Girls seem

to place a somewhat higher value on congenial co-workers (Item 355) than boys do, although the evidence is not clear on this point, since Item 360, which also deals with co-workers shows no marked difference between the attitudes of boys and girls in this respect. Size of pay check (Items 350, 356) seems slightly more important to the boys than to the girls, and job security (Item 351) seems markedly more important, when just those students in Grade 10 and above are considered. The girls, like the boys, place considerable value on work that seems important (Items 352, 358). The value placed on the following job features shows a much closer relationship with grade placement in the case of the boys, than in the case of the girls:

Interesting work	(Item 357)
Job security	(Item 351)
Freedom to make decisions	(Item 353)
Work that seems important	(Item 352)
Opportunity for advancement	(Item 354)

For girls, as for boys, the value placed on work that seems important (Item 352) is positively correlated with grade placement, though to a lesser degree.

G. Summary and Conclusions

1. Relation of grade placement of 15-year-olds to their scholastic achievement level

Among the total group of 15-year-olds in the United States, scores on almost every test in the TALENT battery show a clear and sharp gradient with respect to grade placement. This gradient, which starts with the Grade 12 students at the top, and runs downward to those in Grade 6 and below, and to the 15-year-olds not in school at all, is particularly pronounced in the case of reading level, mathematics achievement, and achievement in other academic areas.

Thus, in the case of students who are all the same age (e.g., 15), grade placement has considerable utility as an indirect index of scholastic achievement level. This relationship between grade placement and scholastic achievement has somehow managed to survive despite the attenuating effects of all the policies designed to make the grade groups very homogeneous with respect to age that have been imposed in many schools--e.g., 100 per cent promotion, social promotion, no acceleration--and despite the wide differences among schools in type of student body and consequently in standards. All these factors have operated in the direction of making the students in a grade more heterogeneous in scholastic achievement and thus have definitely reduced the relationship of grade placement to achievement level--but the relationship still exists, and is still sizable.

In order to utilize grade placement effectively as an index of scholastic achievement, the student's grade placement must be considered in relation to his age. Reference back to the data of Chapter IV makes this apparent; performance of the 14-year-old ninth-grader in most scholastic areas is vastly better than the performance of the 16-year-old ninth-grader.

2. <u>Eighth-grade 15-year-olds versus ninth-grade 15-year-olds</u>

There is a particularly large difference (in test scores and other factors) between the 15-year-olds still in Grade 8 and those in Grade 9. This is probably because nearly all those in Grade 8 have failed one year or more, while those in Grade 9 are for the most part late starters in the first grade, who have never failed a grade.

3. <u>Background factors related to scholastic achievement level</u>

The following are among the many factors that have been found to have a substantial relationship to the grade placement of the 15-year-old, and thus are tentatively inferred to have a relation to his scholastic achievement level.

    a.   Father's occupation, father's education, and mother's education.

    b.   Plans to complete high school. However the relationship is noticeable primarily at the ninth-grade and below. (Hardly any of the 15-year-olds in Grade 10 or above indicate they expect to become dropouts.)

    c.   Plans to go to a four-year college (rather than a junior college); plans to get graduate degrees; plans to start college right after high school (rather than postponing it to work for a while or to complete military service); plans to go to a liberal arts college, as opposed to an engineering college. (On this type-of-college-planned scale, which is related to grade placement of 15-year-olds, "university" is about midway between liberal arts college and engineering college.)

    d.   Plans to prepare for and enter any of the following occupational fields: physical science, medicine, law, engineering. Plans to become a teacher are <u>positively</u> correlated with grade placement among 15-year-old girls, but the correlation is <u>negative</u> for boys.

    e.   Plans for military service. (Boys at the higher grade levels express a preference for postponing completion of their military obligation until they have graduated from college; boys at the ninth-grade level are more likely to plan to enlist right after high school.) Interest in a permanent military career is <u>negatively</u> related to grade placement.

      f.   Economic plans and expectations: willingness to save
money; expected ratio of cash purchases to credit pur-
chases; degree of importance attached to having life
insurance; expected income; proportion of income expected
to be saved (and particularly the proportion to be put
into life insurance or a savings account). It should be
noted that the relationship of practically all of the
above factors to grade placement occurs primarily for the
boys; for the girls the relationships are non-existent,
or at best very slight.

      g.   Value the student places on the following job character-
istics: job security, opportunity for advancement, free-
dom to make decisions, interesting work, work that seems
important. For most of these factors, like those discussed
under the heading "economic plans and expectations", there
is a much closer relationship to grade placement for the
boys than for the girls. In fact hardly any of these
factors except value attached to "work that seems impor-
tant" has more than a negligible relationship to grade
placement for the girls.

4. <u>Sex differences in test scores</u>

Normative data obtained in the present study has tended to confirm,
and has also augmented, the findings of previous research in regard
to differential aptitude and achievement patterns of boys and girls.

Of particular noteworthiness is the fact that very pronounced differ-
ences are found between boys' means and girls' means in many areas
of information; the boys are better informed in some areas and the
girls in others. Not only are many of the differences quite large,
but, being based on large and carefully established samples, they are
also very stable, and indicative of real population differences. It
seems clear that these differences in information profile reflect
differing interest patterns. Evidence to this effect is provided
by the fact that differences in information scores are accompanied
by corresponding differences in scores on the Interest Inventory scales.

Boys score considerably higher than girls, on the average, in techni-
cal information (information about aeronautics and space, electricity
and electronics, mechanics, and engineering), in scientific informa-
tion, and in the vocabulary of mathematics. They also score much
higher than girls in information about sports and various outdoor
activities (hunting and fishing in particular). Moreover boys appear
to know a little more about social studies, law, and things military.
Girls, of course, know more about home economics. They also appar-
ently have more information about music and art (particularly the
former), theater and ballet, and names of colors. They know more
about clerical practices, a fact which is entirely compatible with

the fact that they score considerably higher than boys on the "Office Work Interest" scale of the Interest Inventory. Also compatible with some of the sex differences in information that have been mentioned above are the higher scores of the boys on the following Interest Inventory scales: Mechanical-Technical Interest, Physical Science Interest, Outdoor Recreation Interest, Sports Interest.

In areas other than information and interests, marked differences are also noted. Boys score somewhat higher than girls, on the average, on the Creativity Test, Mechanical Reasoning, Visualization in Two Dimensions, and Visualization in Three Dimensions; also on the Mathematics Test.

Girls, on the other hand, score higher than boys in English, reading comprehension, and most of the other strictly verbal skills. They also do better on rote memorization tests (Memory for Words and Memory for Sentences) and on the various tests of speed and accuracy (for instance, Arithmetic Computation, Clerical Checking, Table Reading, and Object Inspection).

Of particular interest is the fact that boys and girls turn out to be about equal in the Abstract Reasoning Test. This serves to confirm the utility of that test as a control variable, a purpose for which it is being used quite extensively in Project TALENT data analyses.

Chapter VI.   SUMMARY AND CONCLUSIONS

A. Summary of Procedure

1.   Sample selection and data collection

A probability sample of all 15-year-olds in the United States was
established. This sample consisted of roughly four and one-half
per cent of all 15-year-olds in Grades 9-12 and slightly less than
one-half of one per cent of all other 15-year-olds. The Grade 9-12
segment of the sample was tested as part of the regular Project
TALENT testing. A concerted effort was made to locate all members
of the other segment, test them if possible, and if they were not in
school, to find out at what point in their school careers they had
dropped out, and why. A special questionnaire, the "Student Infor-
mation Blank Supplement" (SIB Supplement), was used to elicit this
information and other salient facts about the dropouts.

2.   Analysis of data

Appropriate analyses (summarized briefly below) were carried out for
the following groups:

a.   The sample of 15-year-olds as a whole. Most of the analyses
     in this category were done for 15-year-olds classified by
     grade and sex, as well as for the total group.

b.   The 15-year-olds not attending school.

c.   The regular Project TALENT sample. For most of these analyses
     the students were classified by age, grade, and sex.

In brief, the data analyses were as follows:

a.   For the sample of 15-year-olds.

     1) Percentile norms were established for 15-year-old boys,
         15-year-old girls, and the total 15-year-old population,
         for 52 test score variables.

     2) Corresponding means and standard deviations were obtained
         for the same 52 variables and also for 22 additional vari-
         ables.

3) Intercorrelations based on a ten per cent subsample were obtained among 111 score variables, for 15-year-old boys in high school (Grades 9-12), for 15-year-old boys not in high school, and for 15-year-old boys in general; also for the corresponding three categories of 15-year-old girls; also for 15-year-old boys and girls combined.

4) Distributions of responses to 100 SIB items and scores on 18 test variables were obtained, jointly by grade and sex (with the dropout group arbitrarily treated as a "grade"). Along with the distributions, means and standard deviations were also obtained.

b. For the 15-year-olds not attending school.

1) An effort was made to determine whether very many 15-year-olds have dropped out of school, and how many of them might have been able to graduate from high school had they not dropped out.

2) Special analyses of the responses to the SIB Supplements were carried out.

3) An analysis was made, in terms of public secondary school taxonomy groups, of school districts in which the 15-year-old dropouts resided. For purposes of comparison, a similar analysis was also carried out for the 15-year-olds in elementary school (Grade 8 and below), and for Grade 10 students (whatever age).

c. For the regular Project TALENT sample.

In addition to analysis of the data for the sample of 15-year-olds, special analyses were made of the regular Project TALENT sample (Grades 9-12, all ages), in order to provide a background of facts against which the data for the 15-year-olds could be interpreted. These special analyses consisted primarily of age-grade-sex distributions, determination of means and standard deviations of test scores within grade categories and age-grade categories (separately for boys and girls), and intercorrelations by grade and sex.

3. Data available for future analysis

As a result of this study of 15-year-olds, the regular Project TALENT data have been augmented by the following important sets of data:

a. Project TALENT data on the entire eighth grade in certain schools which were in the special sample and accepted the option of testing all eighth-grade students along with the 15-year-olds, instead of just testing the 15-year-olds.

b. Project TALENT data on a sizable probability sample of 15-year-olds in elementary school.

c. SIB Supplements on a comparatively small but informative group of 15-year-olds not attending school. Information acquired by interview has been incorporated in these documents. Test scores are also available for a few of these boys and girls but proved not to be obtainable for most of them.

All of these data have been added to the Project TALENT master tape, and thus will be available for use in any special analyses carried out in the future in which such inclusion would be appropriate.

B. Results and Conclusions

1. ## Success of the data collection phase

The 15-year-olds in Grades 9-12 who were included in this study were an integral part of the regular Project TALENT sample. As such, there seems to be no reason to doubt that they provide accurate information about that segment of the 15-year-old population that they are assumed to represent, since the sample selected was an extremely large one, carefully established on probability principles, and accurately weighted in accordance with these principles, and since the acceptance rate among the schools invited to participate was phenomenally high (about 93 per cent), with no evidence that the remaining seven per cent were systematically biased in any important way (other than the administrative considerations which in most cases underlay their declination of the invitation).

True, most of the analyses were based on complete fully processed cases only (in other words, the cases tabulated in Table V-1), but this is the same procedure that has been followed thus far in most of the Project TALENT analyses, and careful scrutiny of the data has yielded no reason to suspect that these fully processed complete cases are systematically different in any important way from the other cases in the sample.

In the case of the 15-year-olds in Grade 8 and below, our information on the proportion of the ones who should have been in our sample that were actually located and tested is considerably less clear cut. We know we do not have all of them, of course, but it does seem likely that we have a very substantial proportion of them, particularly at the Grade 8 level. This inference is based in part on the 1960 census data. The same data suggest that we may have a somewhat smaller proportion of the cases at the Grade 7 level. Here, too, most of the data analyses were of necessity limited to the complete fully processed cases. Under the circumstances, it is difficult to know just how representative the cases for which scores are available are, but it seems likely that the results are reasonably sound. The very

low scores typically obtained by these elementary school students are certainly compatible with expectation, in view of the fact that most of these boys and girls are at least two years behind the normal grade for their age.

As for the 15-year-olds who are not attending any school, whatever independent evidence we know about (e.g., census data, compulsory education laws, etc.) suggests that there are very few of them and that most of the few there are, are concentrated in a few "pockets". We found (or identified) some of them--certainly not all of them, and probably not as big a percentage of them as was found for the 15-year-old eighth graders, but still an appreciable number. Approximately 40 per cent of those located were interviewed and SIB Supplements were filled out for them. Most of them were apparently unable to take the tests.

2. <u>Suitability of Project TALENT Battery below the high school level</u>

The Project TALENT Battery is apparently reasonably appropriate for Grade 8 students, and possible even for most Grade 7 students, although not designed for these levels. But it is clearly far too difficult to be handled successfully by most of the boys and girls who have dropped out of school by age 15. (Some evidence on these points is mentioned in Paragraphs 4 and 5 below.)

3. <u>Sex differences in test scores</u>

Many researchers have studied differences between boys and girls of high school age in aptitude and achievement levels, but these studies have usually compared boys and girls in the same grade. The present study has provided one of the first large-scale sets of data suitable for a comparison of boys and girls of the same age. Of course, there is bound to be a tremendous degree of similarity in results between studies based on age-matching and studies based on grade-matching, because of the fact that most boys and girls in high school have never been either accelerated or retarded during their school careers, so that to a considerable extent the same boys would be compared with the same girls regardless of the basis of matching. Nevertheless, it is of interest to note that the results for the 15-year-olds are essentially quite similar to results for grade groups falling, in general, somewhere between Grade 9 norms and Grade 10 norms. The patterns of sex differences in mean scores are quite similar to those usually obtained when grade groups are compared. Boys turn out to be slightly better in mathematics and considerably better in technical areas. Girls are better in English and in various linguistic and verbal skills; also in perceptual speed and accuracy.

Boys in a given grade are a little older, on the average, than the girls. Therefore, a small part of the advantage boys gain on tests

in certain non-curriculum-linked areas (e.g., Sports Information, Mechanical Reasoning, Creativity) when grade groups are compared vanishes when age groups are compared because the boys no longer have the benefit of the very slightly greater maturation with which their added months of age endow them.

4. The 15-year-old dropout

Outside of a very few localities, there are hardly any 15-year-olds who are not enrolled in school. The localities where there are substantial numbers of 15-year-olds who do not attend school seem primarily to be areas with appreciable numbers of such disadvantaged groups as Negroes, Latin-Americans, and Indians.

Most of the 15-year-olds not in school who were located could not be tested, although many of them were interviewed and provided the information called for by the SIB Supplement.

Those that were not tested were either unable to take the tests (presumably because of inadequate reading and writing skills, though the demands many of the TALENT Battery tests make in these areas are minimal) or unwilling to try. And hardly any of the few who were tested were able to perform at much better than the chance level on the tests. Of 24 boys and girls who took the Reading Comprehension test, only two scored above a ninth-grade percentile of 12, and the median was a ninth-grade percentile of 6. Although actual scores are available for so few of the dropouts, the inability of so many of these boys and girls to take the tests speaks for itself, to some extent. It seems not at all unreasonable to infer, at least tentatively, that almost all of these dropouts are very poor readers.

At least half of these boys and girls, and probably even a larger proportion, do not complete Grade 8, and well under a fifth of them report having completed as much as one year of high school. Furthermore despite the enforcement in many schools in recent years of a policy which, if not exactly "100 per cent promotion", is something quite close to it, well over half of the 15-year-olds who dropped out were below the normal grade for their age when they did so. Some of them were several years behind their age group.

This scholastic retardation, considered in conjunction with the apparent inability of almost all of these boys and girls to cope with the TALENT Battery or to fill out the Student Information Blank-- tasks that most ninth graders cope with successfully--strongly suggests that most of the 15-year-old dropouts stand very low in the distribution of scholastic aptitude, and are at a very low level of achievement in areas requiring information, reading ability, reasoning, or other components of scholastic ability.

5. __The 15-year-old still in elementary school__

Relatively few boys and girls who have reached their fifteenth birthday by March 1 have not reached Grade 9 by then.

In general the 15-year-olds who have not reached Grade 9 are very poor readers and are seriously retarded in educational achievement. This is not surprising since those that manage to finish at least eight grades will require, at the very minimum, nine years to do so, and in most cases ten years, or maybe even more. And some will never finish Grade 8. They will drop out of school as soon as they reach 16.

Nevertheless many of them are able, in general, to perform at better than chance level on some of the tests, and a few of them get quite good scores.

6. __The age-grade distribution and its bearing on the dropout situation__

At every grade level there are two age groups that account for most of the students; for instance ages 14 and 15 account for most of the Grade 9 students; ages 15 and 16 for Grade 10; ages 16 and 17 for Grade 11; ages 17 and 18 for Grade 12. (This is true for both boys and girls, although the girls in a given grade are a bit younger on the average than the boys.) These age groups should include, among others, all of the students who started Grade 1 at the normal age and have made normal progress in school. For these normally progressing boys and girls, the ratio of the younger of the two age groups in the grade to the older should be approximately two-to-one. The Project TALENT age-grade data suggest quite strongly that accelerated students are more likely to graduate from high school than students who started Grade 1 at the normal age and have made normal progress; and that the normally progressing students are less likely to become dropouts than students who have had to repeat a grade. The latter in turn are less likely to drop out than students who have failed several grades, who, the evidence indicates, are quite unlikely to graduate.

Furthermore, there is some evidence that even within the two-year span of ages that encompasses all normally progressing students, students in the older of the two age groups are considerably more likely to become dropouts than are those in the younger group, almost all of whom will graduate. The excessive dropout among students at the upper end of the normal age range undoubtedly is due in part to the fact that the older group would include some boys and girls who have had to repeat a grade, while the younger group might include a few who have gained a grade (either through early admission into Grade 1 or through acceleration).

But acceleration, early admission, and retardation do not seem to be the whole answer. Apparently, the phenomenon of greater dropout among

the older students applies even within the group that has been making normal progress right along. While we do not know the reason, some very preliminary exploratory data analysis seems to support an explanatory hypothesis, which was discussed briefly in Chapter IV, Section F-1 and is broached again in Section 7 below. The results of the exploratory data analysis themselves will not be presented here, because they are too rough and preliminary in nature, and because they are tangential to the purposes of the present study. But the resultant tentative hypothesis is being mentioned, nevertheless, mainly because it concerns an important problem--and therefore may be worth future research , that would either confirm or disprove it. The problem of the slightly over-age student who drops out of high school derives its importance in part from the fact that these are the dropouts who have the greatest potential, and therefore the ones who have the most to lose by dropping out, and in part from the fact that the dropouts in this category are so numerous. While boys and girls in this category (very slightly over-age, or towards the top of the normal age range) are not nearly so likely to drop out as the boy or girl who is several years retarded, the former category, because it contains far more students to start with, contributes a vastly greater proportion of the high school dropouts than does the latter group.

7. **A hypothesis concerning high school dropouts who are capable of graduating**

Analysis of the Project TALENT data suggests that within the 12-month span of ages that constitutes the normal age range for the students in a given grade in a given locality, there may be a definite gradient of likelihood of graduation, with those at the younger end of span being considerably more likely to graduate than those at the older end. Many of the boys and girls who have made normal progress through school but are near the older end of the age span of approximately 12 months into which normally-progressing students fall are apparently under considerable temptation to drop out when they get to be 17 or 18 years old. One contributing factor is the fact that at age 17 the youngster becomes eligible to enlist in the Armed Forces. Also many more job opportunities open up after 18. A sizable proportion of the girls who are not planning to go to college drop out to get married. Students who are a year or two older than many of their classmates require an unusual amount of motivation to stay on in high school after friends graduate who may be only a month or two older but are a year ahead of them in school.

Most of this discussion about motivating factors is just inference, of course, (or perhaps "educated guess" would be a more precise term) but the extremely sharp drop in numbers of high school students from age 17 to 18 to 19 is a fact. Evidence to this effect is provided not only by the Project TALENT data but also by data about school enrollments from the 1960 census. It is a fact that relatively

few students stay in high school past the age of 18 and it is a fact that much of the dropout occurs after Grade 11. All these facts seem compatible with the hypothesis suggested above that with the administrative policies currently prevalent in the schools, month of birth is a non-negligible factor in determining likelihood of graduation.

Insofar as this hypothesis is valid, it probably even extends to the students who lose a year somewhere along the line, instead of making normal progress all the way. Consider, for instance, two hypothetical students, Fred and Joe. Fred, having been born in October, was permitted to start Grade 1 one month before his sixth birthday. Joe, on the other hand, having been born in November, just one month later than Fred, had to wait one full year longer, until he was nearly seven, to start Grade 1. Let us assume that both Fred and Joe have to repeat the eighth grade, and that both of them then go on to high school. When Fred starts Grade 12 he will be nearly 18, just about the same age as some of his classmates who have never had to repeat a grade. Fred is far from a brilliant student (otherwise he would probably not have had to repeat a grade), but he plugs along doggedly, and graduates in June, at the age of 18 years and eight months. Joe, likewise, is not an especially good student, but he is at least as capable as Fred. However Joe, unlike Fred, is only ready to start Grade 11 when he is nearly 18. Most of his classmates are not even 17 yet; some of them, not markedly better students than he, have not even reached their sixteenth birthdays. Joe realizes he will be an old man of nineteen-and-a-half when he graduates. He gets disgusted, and after a few months in Grade 11 he drops out of school and enlists. Joe could have graduated from high school. He had the necessary ability; we know that, because we have hypothesized that he was as capable as Fred, who did graduate. This little tale about Fred and Joe illustrates our hypothesis about the effect of month of birth. The student who is close to his seventh birthday when he starts Grade 1 enters with a built-in disadvantage that decreases the probability of his graduation from high school. A corollary is that if by chance or otherwise he loses another year chronologically somewhere along the line (as Joe did), the odds against his graduating become very large. Applying our hypothesis to our sample of 15-year-olds, we would conclude that the boy born in September or October 1944 is somewhat more likely to graduate from high school than the boy born in November or December 1944. Time will tell whether this supposition is correct. Or, to put it a little more precisely, time and our follow-up of the Project TALENT students who were in Grades 9 and 10 when tested will tell.

8. The dropout: recapitulation and possible partial solutions

A great deal of confusion about "dropouts" has occurred because the term covers such a wide range, including both seriously educationally retarded students who leave school at age 16 or earlier without ever having reached senior high school, and the "near misses" who stay in

school until they reach an age when many boys and girls are graduating from high school--about 17 or 18--but do not themselves graduate. Generalizing about "the dropout" without making this distinction has led to confusion. The non-entrants into high school and the high school dropouts must be considered separately. It is being widely quoted that "70 per cent of the dropouts have normal or above-normal intelligence". Project TALENT results have shown that boys and girls are about equally likely to drop out of school, and that most non-graduates leave school at age 17 or 18 and finish at least the tenth grade; a large proportion of them finish the eleventh grade. Most such students have enough aptitude that they could finish high school if they remained a year or two longer. However the most that can be expected from many of them is that they will stay in school as long as the average graduate, or at the very most until about age 18.

The situation is aggravated by the fact that school systems with midyear entering classes and midyear promotions are rare. This means that boys and girls whose sixth birthdays fall just after the cut-off date for admission to the first grade have to wait a whole year instead of just half a year. It means, furthermore, that if a child has to repeat a class he loses a whole year instead of half a year. Possibly, then, some reduction in the number of high school dropouts could be achieved if schools that are large enough to make such an action economically feasible resumed the once popular practice of having midyear entry and midyear promotion.

Another approach that might be helpful, whether the school system has midyear entry or not, would be to attack the problem of the "near misses" from the other end, by enabling them to obtain high school diplomas without staying in school much past their eighteenth birth-day. Of course it is possible to do this now, but more explicit programs, designed especially for those who are a little older than most of their classmates and yet seem to have the ability to finish a high school course of study by the normal age of 17 or 18 if allowed to make up for lost time, might have an important impact in lessening the amount of non-graduation of these "near misses". Approaches that might be incorporated into these "extra-effort" programs might include special remedial instruction (perhaps of a programmed nature) to supplement normal instruction, and special scheduling. For example, if a student of at least average ability is close to seven years old when he starts the first grade, it might be entirely possible during the next 12 years to schedule his grade progression in such a way that he has a chance to graduate at age 17 like the luckier boy who was six when he started. The same thing might be done for those who lose a year somewhere along the way but seem to have sufficient ability that they would profit from the special scheduling.

A concerted effort to keep in touch with the "near miss" youngsters who, despite all efforts to keep them from doing so, leave school

at age 17 or 18, after having reached Grade 11 or 12, and to encourage them to finish the work for a high school diploma, through correspondence courses, night school, or other special programs, might also prove worthwhile.

Furthermore, these special approaches might even help some of those who are more than just one year behind their age group in grade placement, since this group of youngsters who have had to repeat a couple of grades, and thus may be regarded as being chronologically retarded to a serious extent, may include some boys and girls who do have the ability to reach the minimum 12th-grade-performance level if they are given a special schedule and extra help, practice, and remedial instruction. Even among the 15-year-old group in Grade 8, perhaps as many as ten per cent might be salvageable in such a way.

It is recognized, of course, that many chronologically retarded youngsters are so educationally retarded because of unfortunate environment and other factors that they would probably not be able to be brought up to the 12th-grade-performance level that would justify a high school diploma. Most of those dropping out of school earlier than age 17 are very seriously retarded in basic skills and educational achievement.

The ones who drop out before high school are typically 16 years old and in the eighth grade, where the modal age is 13; their basic skill and achievement level is seriously below the Grade 8 level. There appears to be hardly any dropout at the elementary school level among those who enter school at age six, can read at their grade level, and appear to have the potential to graduate at age 17.

Perhaps the greatest impact on the early dropout problem might be an all-out effort to improve the reading skills and other basic educational skills (the "three R's", in other words) of the weaker students in the elementary grades.

9. Age, grade, and ability

It has frequently been pointed out in the past that the variability of students within a grade, not only in aptitudes but in scholastic achievement, is far greater than the variability among grade means. The present study has confirmed this, showing that many students score much higher than the average student several grades above them. The study has also shown that the variability within an age group is enormous, in comparison with the variability among group means.

The means for 15-year-olds fall somewhere between the Grade 9 means and the Grade 10 means. On most tests the 15-year-old population is neither markedly more variable nor markedly less variable than the Grade 9 population or the Grade 10 population. This is not at all surprising, of course, since grade and age are quite closely linked

in most schools--a situation brought about by the fairly widespread administrative policy of lockstepping students in a one-grade-per-year progression, with relatively little retardation and even less acceleration or early admission to Grade 1.

Nevertheless these factors (acceleration, retardation, etc.) do operate to some limited extent, sufficient to eliminate the perfect correspondence between grade and age. The outcome is a very close _inverse_ relationship between age and performance on some tests, within a single grade group, accompanied by an even more pronounced _direct_ relationship between grade placement and test performance within a single age group (e.g., 15).

But it is advisable to avoid falling into the trap of mistaking the mean for the individual. If we know a student's age and what grade he is in we may have a fairly good idea as to whether he will do well or poorly on certain aptitude and achievement tests, but we won't know _how_ well, or _how_ poorly, since even within groups that are homogeneous with respect to both grade and age there may still be tremendous variability in test scores.

C. A Final Word

One of the most important outcomes has been the development of national norms on a very wide variety of aptitude and achievement variables, on the basis of an extremely large sample (close to 75,000 boys and girls), representing a complete age group. Since the particular age group on which the study was based was age 15, some of our readers may wonder whether this doesn't open up a need for parallel studies on other age groups--age 16, age 17, age 18, etc. The answer to this is that the data we have amassed on the 15-year-old, together with the supplementary information on high school students of all ages in all grades, provide us with the basis for extending the data analysis to get useful estimates about the distributions of the variables under consideration, for complete age populations other than age 15. In other words inherent in the data collected for the present study and for the main Project TALENT study, are the answers to questions about what our 15-year-old population was like when it reached age 16, what it was like at age 17, and what it will be like at age 18.

The answers to these questions are embedded in the data, and methods will have to be developed for extracting them. It is anticipated that such methods _can_ be developed, thus greatly extending the utility of the present data, by making it yield information about the distribution of various aptitudes, and achievement in various areas, for a population of young adults.

A P P E N D I X   A

MISCELLANEOUS REFERENCE MATERIALS

Appendix A: Part 1

SUPPLEMENT FOR THE STUDENT INFORMATION BLANK

Directions:

1. Fill in the information below.
2. If you are not enrolled in any school, answer only questions 1 - 11.
3. If you are a high school graduate answer only questions 12 - 18.
4. Do not answer questions 19 to 33. These are for the interviewers use only.

Name _____
               Last   First   Middle

Testing number _____ School code number _____

Name and address of the last school you attended.

Name of school _____ __

City _____ State _____

DO NOT WRITE IN THE SPACE BELOW.

FOR INTERVIEWERS USE ONLY

Additional Identification Data for 15-Year-Olds Who do not Appear for Testing

Street & house number _____
                         House number   Street

City _____ Zone ____ State _____

Father' name _____
                    Last   First   Middle

Mother's maiden name _____
                            Last   First

Date of interview _____

Age _____ Date of birth _____   Sex: M   F

(Directions for the interviewer appear on page 7.)

QUESTIONS 1-11 FOR THOSE WHO ARE NOT ENROLLED IN ANY SCHOOL

1. When did you leave school?

Month _____

Year _____

2. Why did you leave school?
(Write in your answer.)

_____

_____

_____

_____

3. Have you thought about returning to school? (Place an X in the parentheses.)

( ) 1. Yes
( ) 2. No

If yes, under what conditions would you return to school?

_____

_____

_____

_____

_____

4. How many different jobs have you had since you left school?

( ) 1. None
( ) 2. One
( ) 3. Two
( ) 4. Three
( ) 5. Four
( ) 6. Five or more

5. Have you been working regularly since you left school?

( ) 1. Yes
( ) 2. No

6. How much of the time have you been out of work since you left school? (Mark one.)

( ) 1. All the time
( ) 2. About 3/4 of the time
( ) 3. About 1/2 of the time
( ) 4. About 1/4 of the time
( ) 5. None of the time

7. What kind of work are you doing? (If you are not working, what did you do last?) Write in _____

_____

_____

Mark one:

( ) 1. Farm or ranch worker
( ) 2. Worker or laborer
( ) 3. Private household worker
( ) 4. Service worker
( ) 5. Semi-skilled worker
( ) 6. Skilled worker
( ) 7. Clerical worker
( ) 8. Sales
( ) 9. Manager or owner
( )10. Professional or technical

8. Who is your employer? Write in __

_____

_____

Mark one:

( ) 1. A large company or industry
( ) 2. A small local company or industry
( ) 3. A retail business
( ) 4. An individual employer
( ) 5. I am self-employed.
( ) 6. The local or community government
( ) 7. A school or college
( ) 8. The state or national government (except schools)
( ) 9. I am not working now, and I have not worked since I left school.

9. How much money do you make in a week?

( ) 1. Less than $20 a week
( ) 2. $20 - $39 a week
( ) 3. $40 - $59 a week
( ) 4. $60 - $79 a week
( ) 5. $80 - $99 a week
( ) 6. $100 or more a week

10. On the average, how many hours a week do you usually work?

( ) 1. None
( ) 2. 1 to 10 hours a week
( ) 3. 11 to 20 hours a week
( ) 4. 21 to 30 hours a week
( ) 5. 31 to 40 hours a week
( ) 6. More than 40 hours a week

11. In your last year in school, how good were your grades?

( ) 1. All A's
( ) 2. Mostly A's
( ) 3. Mostly A's and B's
( ) 4. Mostly B's and C's
( ) 5. Mostly C's and D's
( ) 6. Below D

STOP HERE. Pass in your booklet.

===

QUESTIONS 12-18 FOR HIGH SCHOOL GRADUATES ONLY.

12. When did you graduate from high school?

_____   _____
     Month   Year

13. How old were you when you graduated from high school?

_____ Years   _____ Months

14. What was your position in your high school graduating class?

( ) 1. First in my class
( ) 2. Not first in my class, but in the top 5%
( ) 3. In the top 6% to 10%

15. About how many students were there in your high school graduating class?

( ) 1. Under 10
( ) 2. 11 - 25
( ) 3. 26 - 50
( ) 4. 51 - 100
( ) 5. 101 - 250
( ) 6. Over 250

16. What is the name and location of the college or university you are attending (or expect to attend)?

Name _____

City _____

State _____

17. What type of college or university is this? (Mark one.)

( ) 1. A teachers college
( ) 2. An agricultural college
( ) 3. An engineering college
( ) 4. A liberal arts college
( ) 5. A college specializing in music or fine arts
( ) 6. A university which includes many of the above colleges
( ) 7. None
( ) 8. Other type (specify) _____

_____

_____

18. What is your college major? If you have not yet chosen a major, in what do you expect to major?

_____

_____

STOP HERE. Pass in your booklet.

If you are taking the tests at school, <u>do not answer these questions.</u>

19. What was the highest grade in school that you completed? (Obtain to the nearest semester.)

   _____

20. How old were you when you started the first grade?

   _____

21. With whom do you live? (Ask about parents, brothers, sisters, other relatives, boarders, roomers, etc. If not living at home, ask who lives in their home as well as with whom they are living.) _____

   _____

   _____

   _____

   _____ Number of people in the home.

22. Who is the breadwinner in your family? (Mark one.)

   ( ) 1. Father
   ( ) 2. Mother
   ( ) 3. Step-father
   ( ) 4. Male guardian
   ( ) 5. Step-mother
   ( ) 6. Brother
   ( ) 7. Sister
   ( ) 8. Other (specify) _____

   _____

23. What is the breadwinner's occupation? Write in _____

   _____

Place an X in one:

   ( ) a. Farm or ranch owner and/or manager
   ( ) b. Farm or ranch foreman
   ( ) c. Farm or ranch worker
   ( ) d. Workman or laborer
   ( ) e. Private household worker
   ( ) f. Protective worker
   ( ) g. Service worker
   ( ) h. Semi-skilled worker
   ( ) i. Skilled worker or foreman
   ( ) j. Clerical worker
   ( ) k. Salesman
   ( ) l. Manager
   ( ) m. Official
   ( ) n. Proprietor or owner
   ( ) o. Professional
   ( ) p. Technical
   ( ) q. Doesn't know and cannot obtain

24. For whom does the breadwinner work? Write in _____

   _____

Place an X in one:

   ( ) 1. A large company or industry
   ( ) 2. A small local company or industry
   ( ) 3. A retail business
   ( ) 4. An individual employer
   ( ) 5. He (she) is self employed.
   ( ) 6. The local or community government
   ( ) 7. A school or college
   ( ) 8. Military services
   ( ) 9. The state or national government (except military services or schools)
   ( )10. Doesn't know and cannot obtain

25. How much education does your father (or guardian) have?

( ) 1. None, or some grade school
( ) 2. Completed grade school
( ) 3. Some high school, but did not graduate
( ) 4. Graduated from high school
( ) 5. Vocational or business school after high school
( ) 6. Some junior college or regular college after high school
( ) 7. Graduated from a regular 4-year college
( ) 8. Master's degree
( ) 9. Some work toward PhD. or professional degree
( )10. Completed PhD. or professional degree
( )11. Doesn't know

26. How much education does your mother (or guardian) have?

( ) 1. None, or some grade school
( ) 2. Completed grade school
( ) 3. Some high school, but did not graduate
( ) 4. Graduated from high school
( ) 5. Vocational or business school after high school
( ) 6. Some junior college or regular college after high school
( ) 7. Graduated from a regular 4-year college
( ) 8. Master's degree
( ) 9. Some work toward PhD. or professional degree
( )10. Completed PhD. or professional degree
( )11. Doesn't know

27. How many rooms are in your home? Count bathrooms, bedrooms, kitchen, living room, enclosed porch, etc.

( ) 1. One
( ) 2. Two
( ) 3. Three
( ) 4. Four
( ) 5. Five
( ) 6. Six
( ) 7. Seven or eight
( ) 8. Nine or ten
( ) 9. Eleven or twelve
( )10. Thirteen or fourteen
( )11. Fifteen or sixteen
( )12. Seventeen or more

Interviewer, Ask Number 28 and 29 of Boys Only.

28. What do you expect to do about the military service?

( ) 1. Enlist as soon as I am of age
( ) 2. Enlist after I have worked for a few years
( ) 3. Wait until I am drafted
( ) 4. Never serve because I do not think I can pass the physical examination
( ) 5. Never serve for other reasons
( ) 6. Other (specify) _____

29. In which branch of the service do you expect to serve?

( ) 1. Air Force
( ) 2. Army
( ) 3. Navy
( ) 4. Marine Corps
( ) 5. Coast Guard
( ) 6. Air Force Reserves or National Guard
( ) 7. Army Reserves or National Guard
( ) 8. Navy Reserves
( ) 9. Marine Corps Reserves
( )10. Coast Guard Reserves

30. How old do you expect to be when you marry?

( ) 1. I am already married
( ) 2. 17 years old or younger
( ) 3. 18 years old
( ) 4. 19 years old
( ) 5. 20 years old
( ) 6. 21 or 22 years old
( ) 7. 23 or 24 years old
( ) 8. 25 or 26 years old
( ) 9. 27 to 29 years old
( )10. 30 to 35 years old
( )11. 36 or older
( )12. I don't expect to marry.

(If not married: Are you engaged?)

31. How many children do you expect to
    have after you marry?

    ( ) 1. None
    ( ) 2. One
    ( ) 3. Two
    ( ) 4. Three
    ( ) 5. Four
    ( ) 6. More than 4 (specify)

    _____

32. How would you describe your health
    for the past 3 years?

    ( ) 1. Excellent
    ( ) 2. Very good
    ( ) 3. Good
    ( ) 4. Average
    ( ) 5. Poor
    ( ) 6. Very poor

33. Do you have any physical disability?
    (If yes, list.)

    _____
    _____
    _____
    _____
    _____
    _____

INTERVIEWER DIRECTIONS

Questionnaire for 15-Year-Olds

School Drop-Outs
High School Graduates

Fifteen-year-olds to be interviewed are school drop-outs and high school graduates who do not agree to appear for testing. The reason for not being tested should be indicated below and entered on Record Form Z.

In some cases in which school drop-outs do appear for testing, it may be necessary to interview them if they have difficulty in completing the question-naires by themselves.

Fill in all of the information on page 1. Ask questions 1 through 11 of school drop-outs; questions 12 through 18 of high school graduates; and questions 19 through 33 of both groups.

Assign each fifteen-year-old a testing number. Give him an Identification Card, and explain the purpose and nature of the follow-up. After the interview has been completed, fill in Record Form Z from the information on the first page.

Please try to interview the 15-year-old. If this is not possible, interview the parent, a guardian, a relative, or anyone else who would have first-hand information on this person. Information from public records should be obtained whenever possible. Record each answer as indicated in the item. In most items this will be by placing an "X" in the parentheses to the left of the option. In other items you are to write in the answers.

Respondent

( ) 1. The 15-year-old
( ) 2. Father
( ) 3. Mother
( ) 4. Step-father
( ) 5. Male guardian or
    foster father

( ) 6. Step-mother
( ) 7. Female guardian or foster
    mother
( ) 8. Brother or sister
( ) 9. Other (specify) _____

_____

Comments (Continue on page 8, if necessary.)
    Reason for not being tested:

Information from public records:

Information from other sources (specify):

Project Talent School Taxonomy Code
for Public Secondary Schools

10. Vocational high schools

   All vocational and trade high schools

21-64. Non-vocational high schools: (General comprehensive, academic or college preparatory, university high schools, and schools for superior students)

   21-22. Cities "A": Largest cities (1,500,000 or more)

      21. Low economic level*
      22. Moderate and high economic level*

   31-32. Cities "B": Large cities (250,000-1,499,999)

      31. Low economic level*
      32. Moderate and high economic level*

   41-44. Northeast: U.S.O.E. Regions 1 and 2 (Me., N.H., Vt., Mass., R.I., Conn., N.Y., N.J., Pa., Del., Md., D.C.)

      41. Urban (5,000-249,999) - low economic level*
      42. Urban (5,000-249,999) - moderate and high economic level*
      43. Small town
      44. Rural

   51-54. Southeast: U.S.O.E. Region 5 (Va., W.Va., N.C., S.C., Ga., Fla., Ky., Tenn., Ala., Miss., Ark., La.)

      51. Urban (5,000-249,999) - low economic level*
      52. Urban (5,000-249,999) - moderate and high economic level*
      53. Small town
      54. Rural

   61-64. Midwest and West: U.S.O.E. Regions 3, 4, 6, 7, 8, 9 (All states other than those listed above)

      61. Urban (5,000-249,999) - low economic level*
      62. Urban (5,000-249,999) - moderate and high economic level*
      63. Small town
      64. Rural

---

*Economic level is based on response to Item 87 of the General School Characteristics Questionnaire.
      "Low" means responses 3, 6, 7.
      "Moderate or high" means responses 1, 2, 4, 5, 8, 9.

Item 87 is as follows:
87. The residences in the area served by your school are best described as primarily

( ) 1. expensive private homes.   ( ) 6. low-rental apartments.
( ) 2. moderate-priced homes.   ( ) 7. low-income areas.
( ) 3. low-cost homes.   ( ) 8. about equally apartments and homes.
( ) 4. high-rental apartments.   ( ) 9. Students are resident students -
( ) 5. moderate-rental apartments.   cannot estimate.

Appendix A: Part 3

Composition of the Project TALENT Battery

		Options per item	No. of items	No. of minutes working time*	No. of scores	Scoring Formula ***
APTITUDE AND ACHIEVEMENT TESTS						
Variable # **	Information Test:					
	Part I	5	(252)	90	(16)	
	Subscales				(15)	
101	1. Screening		12		1	R
102	2. Vocabulary		21		1	R
103	3. Literature		24		1	R
104	4. Music		13		1	R
105	5. Social Studies		24		1	R
106	6. Mathematics		23		1	R
107	7. Physical Science		18		1	R
108	8. Biological Science		11		1	R
109	9. Scientific Attitude		10		1	R
110	10. Aeronautics and Space		10		1	R
111	11. Electricity and Electronics		20		1	R
112	12. Mechanics		19		1	R
113	13. Farming		12		1	R.
114	14. Home Economics		21		1	R
115	15. Sports		14		1	R
190	Part I Total		(252)		1	R

Composition of the Project TALENT Battery (Continued)

Variable #**	Information test	Options per item	No. of items	No. of Minutes working time*	No. of scores	Scoring Formula***
	Part II	5	(143)	35	(25)****	
	Subscales				(22)	
131	1. Art		12		1	R
132	2. Law		9		1	R
133	3. Health		9		1	R
134	4. Engineering		6		1	R
135	5. Architecture		6		1	R
136	6. Journalism		3		1	R
137	7. Foreign travel		5		1	R
138	8. Military		7		1	R
139	9. Accounting, business, sales		10		1	R
140	10. Practical knowledge		4		1	R
141	11. Clerical		3		1	R
142	12. Bible		15		1	R
143	13. Colors		3		1	R
144	14. Etiquette		2		1	R
145	15. Hunting		5		1	R
146	16. Fishing		5		1	R
147	17. Outdoor activities (other)		9		1	R
148	18. Photography		3		1	R
149	19. Games (sedentary)		5		1	R
150	20. Theater and ballet		8		1	R
151	21. Foods		4		1	R
152	22. Miscellaneous		10		1	R
	Overlapping Subscales				(2)****	
162	Vocab. (overlapping other scales)		(9)		1	R
163	Outdoor activities (Hunting + Fishing + other)		(19)		1	R
192	Part II Total (including 10 misc. items)		(143)		1	R
172	Parts I + II combined		(395)	(125)	(2)****	
	Vocabulary scale (Variables 102 + 162)		(30)		1	R
100	Grand Total		(395)		1	R

Composition of the Project TALENT Battery (Continued)

Variable # **		Options per item	No. of items	No. of minutes working time*	No. of scores	Scoring Formula***
211	Memory for Sentences					
	Study	-	(40 sentences)	6	-	
	Test	5	16	10	1	R
212	Memory for Words					
	Study	-	(24 words)	2	-	
	Practice	-	(24)	2	-	
	Test	5	24	4	1	R
220	Disguised Words	5	30	3	1	R
	English		(113)	52	(6)	
231	1. Spelling	5	16		1	R
232	2. Capitalization	2	33		1	R
233	3. Punctuation	3-5	27		1	R
234	4. English usage	3-5	25		1	R
235	5. Effective expression	3-5	12		1	R
230	Total		(113)		1	R
240	Word Functions in Sentences					
	Directions	-	-	$2\frac{1}{2}$		
	Test	5	24	15	1	R
250	Reading Comprehension	5	48	30	1	R
260	Creativity	5	20	20	1	R
270	Mechanical Reasoning	3-5	20	11	1	R
281	Visualization in Two Dimensions	5	24	4	1	R
282	Visualization in Three Dimensions	5	16	9	1	R
290	Abstract Reasoning	5	15	11	1	R
	Mathematics			50	(5)	
311	Part I. Arithmetic Reasoning	5	16		1	R
312	Part II. Introductory	5	24		1	R
320	Subtotal (Parts I + II)		(40)		1	R
333	Part III. Advanced	5	14		1	R
340	Total (Parts I + II + III)		(54)		1	R
410	Arithmetic Computation	5	72	9	3	R, A, F*****
420	Table Reading	5	72	3	3	R, A, F*****
430	Clerical Checking	2	74	3	3	R, A, F*****
440	Object Inspection	5	40	33	3	R, A, F*****

MISCELLANEOUS

500	Preferences Test	2	166	3	1	A
	Themes	-	(2)	(10+)		
	My views about an ideal occupation		1	5+		
	What high school means to me		1	5+		

Composition of the Project TALENT Battery (Continued)

		Options per item	No. of items	No. of minutes working time*	No. of scores.	Scoring Formula***
INVENTORIES						
Variable #**	Student Activities Inventory	5	(150)	20		
	Regular Scales		(108)		(10)	
601	Sociability		12		1	R
602	Social Sensitivity		9		1	R
603	Impulsiveness		9		1	R
604	Vigor		7		1	R
605	Calmness		9		1	R
606	Tidiness		11		1	R
607	Culture		10		1	R
608	Leadership		5		1	R
609	Self-Confidence		12		1	R
610	Mature Personality		24		1	R
	Miscellaneous		42			
	Interest Inventory	5	205	20	****	
	Part I. Occupations		(122)			
	Part II. Activities		(83)			
	Scales: ("core items")		(173)		(17)	
701	Physical Science, engineering, math		16		1	F*****
702	Biol. Sci. and Medicine		8		1	F*****
703	Public Service		11		1	F*****
704	Literary-linguistic		16		1	F*****
705	Social Service		12		1	F*****
706	Artistic		7		1	F*****
707	Musical		5		1	F*****
708	Sports		8		1	F*****
709	Outdoor recreation		3		1	F*****
710	Business-Management		14		1	F*****
711	Sales		6		1	F*****
712	Computation		10		1	F*****
713	Office Work		7		1	F*****
714	Mechanical-Technical		15		1	F*****
715	Skilled trades		18		1	F*****
716	Farming		7		1	F*****
717	Labor		10		1	F*****
	Miscellaneous: "non-core items"		(32)			
	Student Information Blank	2-36	(394)	80		

Composition of the Project TALENT Battery (Continued)

<u>NOTES</u>

* Does not include the time used for giving directions except where otherwise indicated. (The exceptions occur where comprehension of directions is considered an integral part of the testing time allowance.)

** The code for a variable consists of the variable number prefixed by a letter representing the scoring formula. The scoring formula letters have the following meanings:

R = no. of right responses
W = no. of wrong responses
A = no. of items attempted
F = formula score, where the formula is a function of R and W, or R and A, or of variable weights for item responses.

*** This column shows the kinds of scores that have been obtained routinely for all Project TALENT cases.

**** The scoring of <u>Information test: Part II</u> and the <u>Interest Inventory</u> is extremely flexible since each student's responses to the individual items were punched on cards. Items can (and will) be combined to form additional scales besides those indicated in this table.

***** $F-410 = R-3W$
$F-420 = R-W$
$F-430 = R-3W$
$F-440 = R-W$

Interest Inventory Scores (F-701 to F-717)

Each item is scored as follows:

Response	Option	Item Score
A	Like very much	1
B	Like fairly well	2
C	Indifferent or don't know	3
D	Dislike a little	4
E	Dislike very much	5
Omit		3

Appendix A: Part 4

Six a priori Composites of TALENT Tests

Composite Code	Composite	Test	No. of items	Approx. Stand. Score Weight	Raw Score Weight
C-001	IQ Composite	R-250 Rdg. Comp.	48	2	3
		R-290 Abst. Reas.	15	1	5
		R-311 Math I	16	1	4
		C-001 Total	283		
C-002	Gen. Academic Aptitude Composite	R-106 Math Info	23	2	2
		R-172 Vocab. I + II	30	1	1
		R-230 English Total	113	5	3
		R-250 Rdg. Comp.	48	4	3
		R-260 Creativity	20	1	2
		R-290 Abst. Reas.	15	1	2
		R-311 Math I	16	3	-
		R-312 Math II	24	4	-
		R-320 Math I + II	40	-	5
		C-002 Total	829		
C-003	Verbal Composite	R-103 Lit. Info	24	1	1
		R-172 Vocab. I + II	30	1	1
		R-230 English Total	113	2	1
		C-003 Total	167		
C-004	Quantitative Composite	R-106 Math Info	23	1	2
		R-311 Math I	16	1	3
		R-312 Math II	24	2	4
		R-333 Math III	14	1	4
		C-004 Total	246		
C-005	Technical Composite	R-107 Phys.Sci.Info	18	2	1
		R-108 Biol.Sci.Info	11	1	1
		R-110 Aero.Sp.Info	10	1	1
		R-111 Elec. Info	20	2	1
		R-112 Mech. Info	19	2	1
		R-270 Mech. Reas.	20	2	1
		C-005 Total	98		
C-006	Scientific Aptitude Composite	C-001 IQ Composite	283	1	1
		C-004 Quant. Composite	246	1	1
		C-005 Tech. Composite	98	1	3
		R-260 Creativity	20	1 *	12 *
		C-006 Total	1063		

*For Tables V-2, V-3, V-4, and V-5, the raw score weight used was 3 instead of 12, making the standard score weight approximately 1/4 instead of 1.

A P P E N D I X   B

INTERCORRELATIONS AMONG 60 PROJECT TALENT TEST SCORES
BY GRADE AND SEX

For Grades 9 and 12, boys and girls

Based upon Subsample 0
(Students in approximately 10 per cent of the schools in
the regular Project TALENT sample)

Complete cases only; unweighted

Table No.	Group	No.of Cases	Page
B-1	Grade 9 boys	3915	B-2
B-2	Grade 9 girls	3864	B-4
B-3	Grade 12 boys	3027	B-6
B-4	Grade 12 girls	3061	B-8

Table B-1
Intercorrelations among 60 Project Talent Test scores
Boys, Grade 9 (N = 3915) from Subsample 0

Description	MEAN	S.D.
1 GREEN.	10.8940	1.7803
2 VOCAB.	10.7972	4.1468
3 LIT.	10.0587	4.1989
4 MUSIC	4.7928	2.8210
5 SOC.STUD.	12.7236	5.6505
6 MATH.	6.9839	3.9220
7 PHYS.SCI.	8.3172	3.8673
8 BIOL.SCI.	5.3448	2.4428
9 SCI.ATT.	5.1650	2.6529
10 AERO-SP.	4.0498	2.3358
11 ELEC.	7.6904	3.9699
12 MECH.	10.3870	3.5937
13 FURN.	7.3446	2.6166
14 RED EC.	6.7711	2.9086
15 SPORTS	118.3481	2.2296
16 INF.TOT.	8.4284	38.0050
17 ENG./SEN.	9.6414	3.0945
18 ENG./VDS.	11.9985	4.7561
19 ENG.USAGE	7.5379	6.2757
20 SPELLING	14.9752	2.9569
21 CAP.	14.8777	4.8987
22 PUNCT.	7.2370	4.7097
23 ENG.USAGE	72.1619	3.7790
24 EXP.	23.9941	2.6012
25 ENG.TOT.	10.9987	15.1390
26 ENG.TOT.	12.6186	4.5358
27 READ.	7.9216	11.1422
28 RD.COMP.	7.9400	3.7575
29 RD.COMP.	9.1990	4.0496
30 NS.2 DIM.	16.4662	5.6313
31 NS.3 DIM.	14.4220	3.2268
32 EST.REAS.	18.8812	3.4160
33 AR.REAS.	19.0580	4.1691
34 INTROD.	22.5484	6.9408
35 MTH.I+II	17.9160	1.6434
36 INTROD.	33.6794	7.5262
37 MTH.TOT.	32.4276	29.3153
38 COMP.	20.2322	12.3879
39 RD.RDG.	38.5533	23.0008
40 ER.CHK.	15.9640	9.0134
41 COMP.	38.7083	10.2319
42 RD.RDG.	22.5484	6.7998
43 ER.CHK.	18.1934	13.8793
44 INSP.	5.5476	7.0850
45 REF.	1.7750	11.7862
46 ADV.	3.5540	13.6318
47 CLAB.	3.4217	16.0149
48 SENSI.	4.6419	7.4709
49 COR.	1.1870	27.2472
50 UNEESS	4.5581	9.6134
51 CLAB.	9.7239	2.8332
52 SENSI.		2.1652
53		1.5329
54 COR.		2.0632
55 UNEESS		2.2665
56 UDIHESS		2.6749
57 IXTURE		2.2886
58 ADER.		1.2894
59 HF-COMP.		2.2294
60 ITUR.		5.0135

Decimal points omitted

Table B-1 (Continued)

Intercorrelations among 60 Project Talent Test scores

Boys, Grade 9 (N = 3915) from Subsample 0

Column variable codes (31–60): R-232 VIS.3 DIM. · R-290 ASSR.REAS. · R-291 I.AR.REAS. · R-321 I.AR.REAS. · R-322 II.INTROD. · R-333 III.I+II. · R-341 MATH.TOT. · R-310 III.ADV. · R-340 MATH.TOT. · R-344 AR.COMP. · R-130 TBL.RDG. · R-140 CLER.CHK. · R-410 AR.COMP. · R-420 TBL.RDG. · R-130 CLER.CHK. · R-440 OBJ.INSP. · R-410 AR.COMP. · R-420 TBL.RDG. · R-130 CLER.CHK. · A-110 OBJ.CHK. · A-500 PREF. · R-601 SOCIAB. · R-602 SOC.SENS. · R-603 SOC.SENSI. · R-601 VIGOR · R-605 CALMNESS · R-606 TIDINESS · R-607 TIDINESS · R-608 LEADERS. · R-609 LEADERS. · R-610 MATUR. / SELF-CONF.

#	Description	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	MEAN	S.D.
1	SCREEN.	163	293	377	360	402	101	392	297	233	212	163	390	164	105	115	205	-048	020	022	141	282	195	078	256	232	226	194	029	230	226	10.8940	1.7803
2	VOCAB.	405	518	637	601	675	180	661	661	296	232	205	370	148	023	125	142	-121	-085	-010	-036	159	168	-007	222	232	180	134	058	238	216	10.7972	4.1468
3	LIT.	355	454	539	539	589	180	583	660	260	226	193	295	110	018	127	110	-127	-087	-007	-027	152	163	010	193	194	147	123	082	224	171	10.0587	4.1989
4	MUSIC	331	411	491	498	541	168	536	237	226	195	167	281	136	042	123	128	-070	-039	032	-027	181	194	032	201	218	184	170	122	212	214	4.7928	2.8210
5	SOC.STUD.	365	506	626	610	675	179	661	298	298	253	204	416	155	042	127	177	-116	-072	-006	-004	191	178	001	250	246	207	157	089	258	243	12.7236	5.6505
6	MATH.	412	503	630	677	717	240	713	299	236	195	171	359	141	040	112	168	-074	-047	006	-043	138	164	006	250	232	178	142	129	215	258	6.9839	3.9220
7	PHYS.SCI.	393	496	579	576	631	176	620	284	262	196	183	309	134	034	115	122	-104	-055	-002	-027	096	138	-016	167	204	127	099	033	192	201	8.3172	3.8673
8	BIOL.SCI.	365	437	522	474	542	123	526	267	202	146	167	263	062	-024	102	084	-121	-097	-009	-069	085	112	-028	143	157	114	089	036	174	141	5.3448	2.4428
9	SCI.ATT.	302	437	521	482	546	149	535	237	237	183	177	299	108	-004	097	108	-108	-092	-029	-041	141	121	-003	182	169	141	093	029	184	159	5.1050	2.0529
10	AERO.-SP.	363	419	499	487	538	152	529	248	225	151	166	242	099	-005	102	074	-106	-101	-006	-059	110	110	-003	165	165	108	057	015	180	154	4.0498	2.2358
11	ELEC.	406	418	507	466	529	161	523	230	203	137	152	252	084	-008	094	101	-101	-075	-006	-047	083	115	-005	127	179	118	069	000	190	180	7.6904	3.9699
12	MECH.	374	407	497	485	513	116	498	291	243	168	176	307	093	-001	099	114	-128	-082	-024	-010	160	124	-016	192	182	150	088	-023	189	174	10.3870	3.5937
13	FARM.	306	362	432	430	497	065	472	282	220	170	137	332	090	-004	068	150	-110	-086	-037	-023	123	079	-005	166	166	113	093	-017	174	139	7.0815	2.6166
14	HOME EC.	302	428	432	406	530	091	442	253	192	145	118	292	082	060	068	128	-092	-050	-014	000	170	131	021	178	193	162	147	037	209	190	7.3446	2.9086
15	SPORTS	248	428	506	522	563	168	556	338	296	234	203	410	180	060	140	194	-089	-042	021	041	248	162	000	295	209	183	143	114	233	188	6.7711	2.1296
16	LIT.TOT.	457	571	760	677	753	204	739	380	322	253	229	425	158	085	142	176	-135	-088	-006	-023	196	191	006	256	264	206	157	069	275	254	118.3481	38.0050
17	MEM./SEN.	146	207	248	238	445	058	258	195	171	151	141	251	124	029	115	129	-032	026	043	038	080	103	022	086	114	097	065	015	108	124	8.4284	3.0945
18	MEM./WDS.	235	320	393	419	445	141	441	237	179	197	163	337	161	044	133	193	-002	029	057	004	131	137	-002	153	139	139	096	078	164	171	9.6414	4.7561
19	DISG.WDS.	285	417	482	457	530	154	522	266	273	304	236	364	265	107	211	201	017	105	116	062	137	121	055	254	223	211	171	126	211	237	11.9985	6.2757
20	SPELLING	199	341	453	486	515	126	501	332	253	305	153	416	149	118	118	207	-081	-009	-037	006	185	175	022	205	191	202	163	115	191	243	7.5379	2.9569
21	CAP.	291	452	463	474	513	123	499	351	292	247	221	408	124	009	124	182	-141	-075	-031	-018	174	143	-028	188	179	183	131	010	181	176	27.5341	4.8987
22	PUNCT.	381	521	620	650	696	168	678	383	321	268	218	446	168	035	130	199	-124	-089	-017	-061	154	159	-042	199	217	198	146	065	198	230	14.9752	4.7097
23	ENG.USAGE	307	522	514	541	562	095	539	360	297	258	215	356	131	025	126	114	-139	-095	-020	-054	147	133	-042	177	174	151	109	016	184	163	14.8777	3.7790
24	EF.EXP.	271	418	484	457	517	088	491	324	276	214	166	316	093	-037	070	097	-157	-114	-068	-106	110	102	-046	161	142	146	081	014	154	142	7.2370	2.6012
25	ENG.TOT.	375	552	643	658	711	156	689	443	365	324	251	496	170	046	139	206	-162	-102	-039	-055	196	181	-036	235	230	223	161	052	230	241	72.1619	15.1190
26	WD.FUNCT.	356	445	550	577	677	185	609	286	232	210	179	408	124	056	138	188	-048	-036	046	-038	144	151	-026	180	198	150	143	-018	198	176	12.6186	5.6341
27	RD.COMP.	407	541	668	637	711	169	692	375	341	286	217	385	163	017	122	135	-151	-117	-031	-064	175	190	-016	246	242	198	150	123	257	254	7.9195	4.5358
28	CREAT.	419	488	541	529	584	156	574	377	259	202	207	314	160	015	136	127	-110	-079	008	-036	148	148	003	191	211	165	119	079	221	197	23.9941	11.1422
29	MECH.REAS.	562	571	538	484	562	139	549	270	279	185	287	266	140	008	125	085	-114	-080	066	-087	080	071	-043	125	151	087	104	-070	146	110	14.4087	3.7575
30	VIS.2 DIM.	446	552	347	352	382	099	374	412	310	213	307	282	170	046	139	206	-157	-145	-046	-055	114	083	-014	126	149	125	081	052	154	142	10.9987	4.0496
31	VIS.3 DIM.		525					453	197	239	167	238	190	106	-011	188	056	-112	-092	-102	019	003	035	-047	075	070	083	047	-018	060	091	16.4662	6.9408
32	ABST.REAS.	525		539	539	525		569	388	344	253	121	156	062	020	124	035	-092	-081	-004	036	048	062	-023	078	083	056	071	091	079	123	2.4220	1.6634
33	I.AR.REAS.		539		671	539		868	377	283	225	569	487	175	017	108	146	-358	-254	-141	019	085	101	128	042	084	115	063	007	126	101	18.8812	7.5262
34	II.INTROD.		539	671		895	931	895	377	225	240	442	535	453	-086	282	210	-457	-118	100	024	030	117	163	094	106	108	085	-004	118	109	19.0580	29.3153
35	III.I+II.		525		931			914	412	240	255	209	260	245	056	291	055	-103	111	100	-004	089	087	107	088	133	130	085	004	110	132	3.6462	12.3879
36	III.ADV.			525	539			976		382	375	375	375	245	291			103				102	090			115	107		034			5.5854	23.0008
37	MATH.TOT.	449							388	441	382		246	318	306	432	244	085	093	473	057	110	090	060	139	100	102	078	032	105	091	17.9160	9.0134
38	AR.COMP.	388	539							441	322	246		306	235	235	297	069	138	169	118	177	143	060	144	115	143	069	144	191	246	33.6794	10.2319
39	TBL.RDG.	292	539	671				914	441		375	318	260	432	510	445	343	586	911	445	244	223	382	139	080	042	094	137	042	125	158	9.8051	6.7998
40	CLER.CHK.	244	895	895	931	931		976	382	375		886	245	439	385			380	489	088	274	482	583	061	148	137	133	107	076	111	107	32.4276	13.8793
41	OBJ.INSP.	238	121	569	442	209		453		375	886		246	318	886	385	214	289	182	067		223	178	091	110	112	117	047	078	101	091	20.2322	7.0850
42	OBJ.IN.SP.	190	156	487	535	322		609		375	245	246			306	245	246	375	246		223	507	308	292	471	503	546	604	252	412		38.5533	11.7862
43	TBL.RDG.	106	020	031	056	245		569	283	453	439	318	306		385	432	453	447	163	051	118	291	308	292	370	271	285	584	316	318	554	15.9640	13.6318
44	CLER.CHK.	-011	017	124	084	056		574	377	056		886	245	432	385			380	163	042	292	532	494		370	292	254	465	318	433	498	38.7083	16.0149
45	OBJ.CHK.	188	212	126	084	032		374	412	282	291		245	450	445	385			103	087	185	482	583		471	503	504	465	370		412	22.5484	7.4709
46	AR.COMP.	056	106	-200	215	228		242	388	322	375	021	156	319	343	214		376	085	078	223	507	308	254	503	546	482	604	465	379	465	58.1934	27.2472
47	TBL.RDG.	197	344	-088	-096	-096		-092	-358	-457		198	487	042	380	175	242		489	069	289	051	062	133	042	111	170	159	055	017	257	15.8812	7.5262
48	CLER.CHK.	239	253	377	-005	-096		-081	-254	-118	163	249	535	453	911	163	210	457		473	345	517	117	128	094	154	111	112	154	076	058	19.0580	29.3153
49	OBJ.INSP.	070	030	225	-013	-085		-004	-141	-002	111	442	260	163	445	100	455	103	111		274	103	087	107	088	042	101	086	112	064	133	16.0149	23.0008
50	PREF.	-102	-103	-083	-072	-085		-073	-116	-051	-004	375	246	375	067	291	055	-085	111	057		223	178	207	185	223	194	202	120	094	207	22.5484	9.0134
51	SOCIAB.	003	085	139	138	151		150	092		133	110	149	110	154	124	078	051	093	110	223		507	291	532	482	500	500	379	340	465	55.5476	2.8332
52	SOC.SENSI.	035	101	116	124	181		144	102	062	137	090	060	102	103	144	062	062	138	087	118	507		308	494	465	552	584	425	287	611	3.5711	2.1652
53	IMPULS.	-047	-079	-030	-032	-034		-026	-076	-053	006	008	060	143	137	139	-023	-026	-254	060	292	291	308		292	316	285	316	135	252	292	1.7750	1.5329
54	VIGOR	070	130	208	218	233		232	084	106	115	102	214	148	137	110	078	042	118	088	185	532	494	292		471	503	285	370	318	554	3.3540	2.0632
55	CALMNESS	010	063	116	104	181		120	048	085	130	117	225	165	137	133	170	047	107	087	223	482	465	316	471		546	516	404	433	625	4.3217	2.2665
56	TIDINESS		091	067	080	120		091	039	004	110	078	172		147	095	151	055	112	154	194	500	552	285	503	516		604	435	297	652	5.5476	2.6749
57	CULTURE	018	007	030		091		091	004	085	099	032	093	080	147	087	151	112	163	125	202	500	584	316	584	465	604		379	340	578	4.6419	2.2886
58	LEADER.	079	126	189	201	120		257	090	-004	101	100	246	109	137	110	179	051	042	076	120	379	425	135	370	404	435	435		498	412	4.1839	2.2294
59	SELF-CONF.	091	123	225	240	255			109		138	091	246	158	172	107	203	058	133	094	207	465	611	292	554	625	652	578	498	412		1.1870	5.0135
60	MATUR.																															9.7239	

decimal points omitted

Table B-2

Intercorrelations among 60 Project Talent Test scores
Girls, Grade 9 (N = 3864) for Subsample 0

Decimal points omitted

Table B-2 (Continued)
Intercorrelations among 60 Project Talent Test scores
Girls, Grade 9 (N = 3864) for Subsample O

	MEAN	S.D.
1	11.3641	1.3243
2	9.7616	3.9758
3	9.7792	3.8521
4	5.3991	2.8978
5	11.2422	4.9767
6	6.3656	3.5149
7	6.8742	3.4619
8	4.5846	2.2821
9	5.2089	1.9675
10	2.5241	1.6005
11	5.1154	2.5376
12	6.9009	2.7896
13	6.5179	2.5892
14	11.1121	3.3847
15	2.1654	...
16	107.3579	31.3333
17	9.1654	3.0453
18	10.8416	5.0116
19	13.1294	6.5078
20	9.0344	2.8132
21	29.0740	4.0591
22	16.9542	4.5414
23	16.0184	3.2147
24	7.7174	2.7718
25	79.1400	13.0434
26	9.0546	5.0822
27	25.6416	10.3316
28	7.0329	3.4501
29	7.7174	3.3026
30	10.7433	5.4370
31	7.8817	2.8575
32	7.0224	3.1804
33	9.3621	3.2757
34	3.3825	9.3327
35	2.1501	6.5302
36	18.5326	1.5264
37	25.6992	23.4147
38	6.6957	9.0792
39	21.0254	21.0213
40	19.5800	7.9154
41	36.4231	10.6985
42	10.3879	14.1303
43	35.6325	6.6540
44	21.4337	10.6718
45	39.9984	9.0273
46	14.0802	23.4147
47	40.5016	14.4912
48	23.2875	6.8153
49	56.6856	21.8031
50	6.6700	2.9031
51	4.5300	2.3075
52	1.7943	1.5888
53	4.3479	2.1256
54	3.7629	2.4396
55	5.1571	2.7173
56	1.2267	2.2314
57	1.2267	1.3120
58	4.7922	2.3697
60	10.2878	4.9956

Decimal points omitted

Table B-3
Intercorrelations among 60 Project Talent Test scores
Boys, Grade 12 (N = 3027) for Subsample O

#	Description	MEAN	S.D.
1	SCREEN.	11.5534	1.1055
2	VOCAB.	13.9802	3.8096
3	LIT.	13.8041	4.6653
4	MUSIC	6.4424	3.0501
5	SOC.STUD.	16.5920	4.9350
6	MATH.	11.2299	6.1466
7	PHYS.SCI.	10.3783	4.3634
8	BIOL.SCI.	6.7823	2.2252
9	SCI.ATT.	6.5385	1.8815
10	AERO.-SP.	5.0866	2.4489
11	ELEC.	10.4926	4.5128
12	MECH.	13.5296	4.1735
13	FARM.	8.5385	2.1399
14	HOME EC.	9.2213	2.9118
15	SPORTS	8.7734	2.9410
16	INF.TOT.	152.9422	37.5150
17	MEM./SEN.	8.6333	5.9563
18	MEM./VDS.	11.1639	5.2608
19	DISG.VDS.	15.6326	7.0445
20	SPELLING	9.5068	3.021
21	CAP.	29.4120	3.9295
22	FUNCT.	17.5094	4.5611
23	ENG.USAGE	8.9812	3.4728
24	EF.EXP.	82.3664	13.1397
25	ENG.TOT.	10.1348	5.1898
26	RD.COMP.	32.6670	10.3510
27	CREAT.	13.2854	3.9434
28	MECH.REAS.	14.4939	5.6982
29	VIS.2 DIM.	9.6914	2.9769
30	VIS.3 DIM.	9.4668	2.9240
31	ABST.REAS.	9.7760	3.6258
32	LAR.REAS.	12.2088	5.6897
33	II.INTROD.	21.9848	8.6444
34	MATH.I+II.	4.4992	3.1511
35	III.ADV.	26.4840	11.2230
36	MATH.TOT.	31.5345	20.3506
37	AR.COMP.	10.2577	10.2577
38	TBL.RDG.	24.7902	20.8155
39	CLER.CHK.	21.9078	8.1413
40	OBJ.INSP.	40.8209	11.0799
41	AR.COMP.	13.9392	8.2056
42	TBL.RDG.	38.1212	14.7591
43	CLER.CHK.	23.4400	7.3822
44	OBJ.INSP.	43.9164	11.0993
45	AR.COMP.	16.6207	10.0485
46	TBL.RDG.	42.5649	15.4513
47	CLER.CHK.	24.9722	7.4620
48	OBJ.INSP.	61.3026	26.5107
49	PREF.	4.5702	2.9544
50	SOCIAB.	4.4232	2.2972
51	SOC.SENSI.	2.0317	1.6887
52	IMPULS.	3.8388	2.1638
53	VIGOR	4.5814	2.5392
54	CALMNESS	5.4149	2.8321
55	TIDINESS	4.7539	2.3653
56	CULTURE	4.1004	1.4255
57	LEADER.	5.3264	1.4238
58	SELF-CONF.	11.7562	5.3631

Decimal points omitted

Table B-3 (Continued)
Intercorrelations among 60 Project Talent Test scores
Boys, Grade 12 (N = 3027) for Subsample 0

Column headings (abbreviated, left to right):
31 R-282 VIS.3 DIM. · 32 R-290 VIS.3 DIM. · 33 R-311 ABSR.REAS. · 34 R-312 1.AR.REAS. · 35 R-320 II.INTROD. · 36 R-320 MATH.I-II. · 37 R-333 III.ADV. · 38 R-340 MATH.TOT. · 39 R-410 AR.COMP. · 40 R-420 TBL.RDG. · 41 R-430 CLER.CHK. · 42 R-440 OBJ.INSP. · 43 R-410 AR.COMP. · 44 R-420 TBL.RDG. · 45 R-430 CLER.CHK. · 46 R-440 OBJ.INSP. · 47 A-411 · 48 A-420 AR.COMP. · 49 A-430 TBL.RDG. · 50 A-440 CLER.CHK. · 51 A-500 PREF. · 52 R-601 SOCIAL. · 53 R-602 SOC.SENSI. · 54 R-603 IMPULS. · 55 R-60 VIGOR · 56 R-605 CALMNESS · 57 R-606 TIDINESS · 58 R-607 CULTURE · 59 R-609 LEADER. · 60 R-610 MATUR.

#	Description	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	MEAN	S.D.
1	GRREN.	093	160	263	219	254	174	245	217	097	162	089	283	099	105	089	244	064	061	078	145	189	152	112	169	199	156	101	085	181	187	11.5534	1.1055
2	OCAB.	375	491	620	617	666	530	662	351	110	177	120	367	099	015	088	273	007	-060	043	-108	061	170	092	131	213	125	071	128	211	204	13.9802	3.8096
3	LT.	276	401	517	561	586	493	590	298	133	188	124	309	099	057	099	230	028	-012	061	-063	064	188	092	131	197	112	114	167	196	171	13.8041	4.6653
4	JSIC	274	401	458	506	525	466	535	267	104	168	144	276	091	052	115	204	017	-009	071	-088	087	210	070	146	191	134	153	148	197	167	6.4424	3.0501
5	XC.STUD.	316	438	575	583	625	488	618	372	131	172	081	378	091	026	050	277	017	-045	011	-087	045	136	066	129	170	091	054	167	168	159	16.5920	4.9950
6	XTH.	418	531	670	837	832	767	856	419	138	187	119	358	119	075	089	358	055	012	048	-115	043	163	028	133	225	135	099	177	196	237	11.2299	6.1466
7	HYS.SCI.	420	511	599	671	693	603	703	346	104	153	113	357	057	004	077	265	-024	-063	015	-112	002	142	035	109	195	079	046	120	187	187	10.3783	4.3634
8	COL.SCI.	328	345	439	414	457	368	455	203	053	088	076	193	018	-027	050	132	-024	-074	026	-091	009	098	045	097	150	034	049	080	166	132	6.7823	2.2452
9	LI.ATT.	304	411	504	454	510	400	505	278	075	101	103	276	023	-013	070	198	-045	-062	026	-091	026	129	062	087	142	043	011	076	145	125	6.5385	1.8815
10	ERO.-SP.	372	403	463	464	494	437	507	217	071	093	104	187	017	-041	072	117	-045	-094	028	-095	-006	158	080	085	178	068	031	059	144	144	5.0866	2.4482
11	EC.	438	409	504	490	534	446	536	212	077	069	106	210	038	-057	080	151	-011	-103	043	-110	-043	102	039	051	169	057	-006	057	172	172	10.4926	4.5128
12	ECH.	378	339	439	339	407	273	390	201	104	081	099	195	057	-042	082	137	-011	-090	054	-046	059	093	099	129	141	062	-004	168	164	156	13.5296	3.1735
13	VM.	229	342	342	231	295	163	273	189	110	070	044	200	038	-018	024	130	-009	-054	-000	-028	047	065	036	130	127	037	030	022	104	120	8.5385	2.1399
14	ME EC.	300	240	362	306	353	271	348	166	060	085	074	171	045	015	064	126	013	-018	045	-056	062	120	049	130	176	113	083	083	160	166	9.2213	2.9118
15	ORTS	137	323	428	465	486	412	490	349	125	198	130	374	107	103	109	285	049	042	073	-017	149	131	093	209	143	089	067	164	154	100	8.1734	2.9410
16	VF.TOT.	448	547	689	712	757	629	760	393	139	189	141	408	094	025	106	302	036	-053	056	-105	061	190	085	164	242	124	087	149	234	228	152.9422	37.5150
17	EM./SEN.	146	153	204	183	206	141	198	172	058	060	087	218	058	054	087	184	036	042	077	020	-002	021	011	007	068	016	010	011	060	015	8.6333	2.9563
18	EM./WDS.	212	300	372	397	417	342	244	244	098	176	105	303	097	098	089	254	058	046	062	-031	044	099	002	064	117	067	043	077	122	094	11.1639	5.2608
19	ESG.WDS.	268	405	439	438	472	387	472	295	199	354	229	367	237	288	218	308	187	207	182	-016	140	210	116	149	169	129	101	154	178	189	15.6326	7.0445
20	FEELING	138	303	422	448	472	377	429	383	116	287	080	455	107	174	052	312	057	093	016	-017	095	140	060	115	149	134	088	118	140	164	9.5068	3.0921
21	VP.	207	289	427	388	435	304	420	343	101	174	106	411	074	080	088	337	032	024	058	-005	051	095	018	088	121	081	049	061	111	122	29.4120	9.9295
22	HNG.USAGE	340	464	604	647	679	526	671	432	129	211	101	490	100	074	065	388	032	-000	018	-091	060	161	025	110	191	126	109	135	170	201	17.5094	4.5611
23	ENG.USAGE	273	385	521	510	547	422	540	350	106	195	108	381	082	069	053	293	-001	-026	041	-098	039	128	015	089	149	089	075	085	127	151	16.9551	3.4728
24	EXP.	289	386	493	466	514	393	506	324	122	184	091	339	057	044	053	253	-031	-016	006	-135	045	134	002	084	141	080	070	060	125	132	8.9812	2.2653
25	ENG.TOT.	320	466	631	630	679	518	668	470	145	264	124	535	108	111	087	425	030	023	037	-082	073	167	031	124	193	131	100	120	132	198	82.3644	11.7397
26	D.FUNCT.	356	466	536	619	632	538	638	352	109	199	112	382	105	110	089	293	062	051	054	-097	037	168	022	087	166	103	101	147	156	202	10.1348	5.1898
27	D.COMP.	390	555	616	595	650	495	640	416	174	246	169	372	097	067	180	201	-018	-025	053	-121	060	171	077	116	162	096	060	102	189	173	32.6670	10.3510
28	REAT.	465	493	510	474	526	423	514	284	133	152	205	282	096	034	120	201	-025	-016	179	-088	045	130	059	088	168	079	050	086	161	167	10.1130	4.2174
29	ECH.REAS.	607	566	496	307	516	415	336	225	145	128	247	217	213	033	227	151	035	-016	260	-096	-019	074	022	039	157	026	-027	019	113	108	13.2854	3.9434
30	VIS.3 DIM.	461	403	317	307	336	278	336	198	206	231	300	234	213	202	297	191	030	153	260	-027	-012	044	028	053	093	034	-004	037	073	092	14.4939	5.6982
31	VIS.3 DIM.		537	446	415	460	368	458	215	130	107	252	199	086	025	224	133	009	-017	169	-119	-056	038	-002	008	093	015	-014	037	067	092	9.4120	3.3769
32	ABSR.REAS.	458		534	538	578	457	573	337	137	194	241	325	099	004	206	226	023	004	144	-132	000	095	028	061	118	061	020	075	094	109	9.4668	2.9240
33	1.AR.REAS.	375	534		708	885	591	848	382	132	177	443	258	110	048	070	382	046	-019	023	-122	036	107	028	105	178	061	019	114	162	189	12.2088	3.6258
34	II.INTROD.	458	538	708		955	775	953	461	137	194	137	320	112	048	080	317	061	013	042	-118	102	107	013	102	178	120	068	160	178	206	21.9848	5.6697
35	MATH.I-II.	460	578	885	955		758	953	489	146	202	120	561	072	078	085	448	059	000	038	-129	044	132	020	111	200	122	067	153	185	215	—	8.6444
36	MATH.I-II.	368	457	591	775	758		865	353	121	172	115	439	125	087	094	368	081	034	062	-086	053	128	034	122	206	096	082	164	181	203	4.4992	3.1511
37	III.ADV.	458	573	848	953	953	865		476	146	204	125	555	132	080	092	448	068	010	046	-124	049	138	025	120	212	115	063	164	193	223	31.5345	11.2230
38	MATH.TOT.	130	337	377	461	489	591	476		370	285	380	266	814	320	352	186	039	015	039	-052	092	063	001	105	102	127	040	260	136	146	10.2577	20.3506
39	AR.COMP.	107	194	132	194	202	172	204	370		370	310	343	392	720	314	282	265	241	283	086	135	105	050	050	087	118	096	439	299	121	24.7902	20.1736
40	TBL.RDG.	252	241	105	115	120	115	125	162	380		310	235	394	329	951	214	258	280	790	115	064	060	074	055	060	036	044	332	141	068	21.9078	20.8155
41	CLER.CHK.	199	325	490	540	561	439	555	704	380	310		266	331	322	436	901	809	256	434	099	152	102	061	179	099	166	085	392	144	229	40.8209	8.1413
42	OBJ.INSP.	086	099	110	122	072	125	132	194	392	235	394		322	495	408	322	455	950	449	218	156	060	059	082	074	161	079	260	100	092	13.9392	11.0799
43	AR.COMP.	025	071	048	078	087	087	092	320	814	394	329	331		495	436	360	950	379	941	180	112	097	096	122	109	123	075	134	071	123	38.1212	8.2056
44	TBL.RDG.	206	085	070	085	102	094	103	103	720	408	951	234	436		249	360	356	950	408	115	214	058	110	086	066	088	134	099	074	139	23.5400	14.7591
45	CLER.CHK.	133	226	382	437	448	368	448	326	380	951	951	259	322	360		337	337	332	941	163	146	097	102	174	165	142	088	171	141	216	43.9164	7.3822
46	OBJ.INSP.	-009	023	046	061	059	081	068	039	317	265	258	271	809	485	356		499	256	434	254	098	058	072	083	050	046	087	134	065	080	17.6207	11.0993
47	A-411	-017	004	-019	013	000	034	010	015	241	280	280	256	455	950	379	332		499	449	231	138	095	102	111	087	073	058	075	075	116	42.5649	10.0485
48	AR.COMP.	169	144	-023	042	-038	062	046	027	320	282	790	207	434	449	941	332	809	444	444	180	083	082	110	086	074	073	058	075	100	075	24.9722	14.4513
49	TBL.RDG.	-119	-132	-122	-118	-129	-086	-124	-052	101	086	115	099	218	246	180	163	254	274	231	176	083	082	110	086	080	046	065	074	075	116	61.3026	15.7620
50	CLER.CHK.	-056	000	036	044	044	053	049	084	039	105	060	152	112	156	077	146	081	138	083	176		098	056	058	138	088	115	113	066	176	6.5702	26.5107
51	PREF.	-002	-001	107	133	132	128	048	039	050	105	074	102	060	097	096	097	058	095	082	080	501	259	219	501	381	488	413	392	333	409	4.4232	2.9544
52	XC.SENSI.	008	061	105	013	020	025	050	025	050	100	074	061	059	112	074	072	039	063	084	052	259	219	235	436	562	087	190	260	408	558	2.0317	2.2972
53	IMPULS.	093	118	178	102	111	122	100	087	100	106	055	171	082	122	073	083	083	039	047	101	501	436	235	421	147	421	421	439	299	561	3.8388	1.6887
54	VIGOR	015	061	079	122	114	096	087	069	087	118	060	166	073	123	048	142	074	050	056	124	404	562	147	421	477	477	479	360	435	588	4.5814	2.5395
55	CALMNESS	037	075	019	160	153	082	040	047	042	096	044	085	058	128	059	088	046	120	068	088	413	556	190	421	477	546	431	332	278	606	5.4149	2.8321
56	TIDINESS	037	075	114	160	185	164	070	066	066	116	061	161	079	135	091	171	065	075	074	080	138	408	260	439	479	546	431	332	294	536	4.7539	2.3653
57	CULTURE	067	094	162	178	193	181	083	084	116	121	054	144	081	100	071	141	065	075	074	066	333	280	136	299	435	278	294	315	315	409	1.4004	1.4255
58	LEADER.	092	109	182	206	215	203	223	146	121	106	054	229	092	139	068	216	080	123	075	116	409	558	198	561	588	606	536	485	409		5.3262	2.4255
60	MATUR.																															11.7562	5.3631

Decimal points omitted

Table B-4

Intercorrelations among 60 Project Talent Test scores
Girls, Grade 12 (N = 3061) for Subsample 0

#	Description	MEAN	S.D.
1	SCREEN.	11.7351	.7653
2	VOCAB.	12.6560	4.6630
3	LIT.	13.8063	4.7055
4	MUSIC	7.0647	2.9488
5	SOC.STUD.	14.6286	4.8227
6	MATH.	8.0301	5.3159
7	PHYS.SCI.	7.2339	3.3747
8	BIOL.SCI.	5.8239	2.2146
9	SCI.ATT.	6.4668	1.8826
10	AERO-SP.	6.7605	1.7256
11	ELEC.	5.7625	2.8054
12	MECH.	8.6227	3.0197
13	FARM.	7.7102	2.42C8
14	HOME EC.	13.6168	3.3230
15	SPORTS	13.9307	2.2C2
16	INF.TOT.	131.8455	33.5982
17	MEM./SEN.	9.3551	3.1226
18	MEM./WDS.	13.2587	5.6376
19	DISG.WDS.	17.4698	6.93C2
20	SPELLING	11.C9C8	2.6585
21	CAP.	30.5815	2.7675
22	PUNCT.	19.9170	4.1874
23	ENG.USAGE	17.9170	3.6452
24	EF.EXP.	9.4828	1.9584
25	ENG.TOT.	88.7115	11.4714
26	WD.FUNCT.	11.6335	5.5702
27	RD.COMP.	33.2787	6.4243
28	CREAT.	9.1457	3.8549
29	MECH.REAS.	8.7537	3.5633
30	VIS.2 DIM.	11.9801	5.6811
31	VIS.3 DIM.	8.3986	2.6974
32	ABST.REAS.	9.0617	3.9218
33	I.AR.REAS.	8.6808	3.5874
34	II.INTROD.	10.1147	4.7667
35	MATH.I+II.	18.7955	7.6608
36	III.ADV.	3.2568	2.4422
37	MATH.TOT.	22.0523	9.3074
38	AR.COMP.	33.4548	17.9879
39	TBL.RDG.	11.3930	7.9677
40	CLER.CHK.	31.5273	19.C982
41	OBJ.INSP.	23.2581	7.2881
42	AR.COMP.	41.5158	10.7278
43	TBL.RDG.	14.3728	7.C224
44	CLER.CHK.	41.8102	13.7977
45	OBJ.INSP.	24.5995	6.6562
46	AR.COMP.	44.2029	10.1335
47	TBL.RDG.	17.3525	7.7039
48	CLER.CHK.	45.2378	13.9550
49	OBJ.INSP.	25.9409	6.6089
50	PREF.	60.2728	23.1830
51	SOCIAB.	7.2901	2.8987
52	SOC.SENSI.	5.6762	2.2540
53	IMPULS.	2.C418	1.7456
54	VIGOR	3.7563	2.1803
55	CALMNESS	4.9043	2.5747
56	TIDINESS	6.6321	2.7336
57	CULTURE	6.1970	2.1949
58	LEADER.	1.4443	1.4382
59	SELF-CONF.	5.4995	2.6C1C
60	MATUR.	12.7C63	5.2176

Decimal points omitted

Table B-4 (Continued)
Intercorrelations among 60 Project Talent Test scores
Girls, Grade 12 (N = 3061) for Subsample 0

	Description	MEAN	S.D.
1	REEN.	11.7351	.7653
2	CAB.	12.6560	4.0630
3	T.	13.8063	4.7055
4	JSIC	7.0647	2.9488
5	C.STND.	14.6286	4.8297
6	TH.	8.0301	5.3159
7	YS.SCI.	7.2339	3.9747
8	OL.SCI.	5.8239	2.2146
9	I.ATT.	6.4668	1.8236
10	RO.-SP.	2.7605	1.7256
11	EC.	5.7625	2.8054
12	CH.	8.6227	3.0197
13	RM.	7.7102	2.4208
14	ME EC.	13.6168	3.2230
15	ORDS	5.9307	2.5202
16	P.	131.8455	33.5982
17	M./SEN.	9.3551	3.1226
18	M/WAS.	13.2587	5.6376
19	SG.HIS.	17.4698	6.9302
20	ELLING	11.0908	2.6585
21	P.	30.5815	2.7675
22	NCT.	19.6393	4.1874
23	IG.USAGE	17.9170	3.0452
24	I.EXP.	9.4828	1.9584
25	IG.TOT.	88.7115	11.4714
26	FUNCT.	11.6335	5.5702
27	COMP.	33.2787	9.4243
28	REAT.	8.7537	2.8549
29	CH.REAS.	1.9801	3.5633
30	S.2 DIM.	8.3986	5.6808
31	S.3 DIM.	9.0617	3.0974
32	SR.REAS.	8.6808	2.9218
33	AR.REAS.	10.1147	3.5874
34	IMTROD.	18.7955	4.7667
35	I.ADV.	3.2568	7.5608
36	I.ADV.	22.0523	2.4422
37	H.TOT.	33.4458	9.3074
38	L.COMP.	11.3930	17.9879
39	L.RDG.	31.5273	7.9677
40	ER.CHK.	23.2581	19.0982
41	J.INSP.	41.5158	7.2881
42	L.COMP.	14.3728	10.7278
43	L.RDG.	41.8102	7.0224
44	ER.CHK.	24.5995	13.3977
45	J.INSP.	44.2029	6.6569
46	L.COMP.	17.3525	10.1335
47	ER.CHK.	45.2378	7.7039
48	J.INSP.	25.9409	13.9550
49	EP.	60.2228	6.6089
50	CJAB.	5.6762	23.1830
51	C.SENSI.	2.0418	2.8987
52	PULS.	3.7563	2.2540
53	GOR	4.9043	1.7456
54	IMNESS	6.6321	2.1803
55	IDNESS	6.1970	2.5747
56	LIKURE	6.6321	2.7336
57	LIKURE	6.1970	2.1949
58	ALDER.	5.4995	1.4382
59	IF-CONF.	12.7063	2.6010
60	TUR.		5.2176

Decimal points omitted

A P P E N D I X C

RAW-SCORE-TO-PERCENTILE CONVERSION TABLES
AND MEANS AND STANDARD DEVIATIONS

BASED ON 15-YEAR-OLD POPULATION*
Separately for boys, girls, and total group

Percentiles, Means, and Standard Deviations for 53 TALENT Variables
and Means and Standard Deviations for 21 Additional Variables

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*Estimates of the population values were obtained by the use of
Weight D to weight the cases differentially.

Table C-1. Means and standard deviations of 15-year-old population
For 74 variables

(Based on weighted cases*)

	No.of Items	Boys Mean	σ	Girls Mean	σ	Total Mean	σ	Page nos. ("C-") for %ile tables M	F	T
Info.Part I subscores										
R-101 Screening	12	11.03	1.71	11.44	1.23	11.24	1.50	4	5	22
R-102 Vocabulary I	21	11.68	4.27	10.61	4.17	11.13	4.25	4	5	22
R-103 Literature	24	10.98	4.54	10.90	4.30	10.94	4.42	6	7	23
R-104 Music	13	5.28	2.90	5.94	2.93	5.62	2.94	6	7	23
R-105 Social Studies	24	13.69	5.74	11.99	5.12	12.82	5.50	6	7	23
R-106 Mathematics	23	8.02	4.69	6.94	4.16	7.47	4.46	6	7	23
R-107 Physical Sciences	18	8.78	3.98	6.86	3.52	7.79	3.87	6	7	23
R-108 Biological Sciences	11	5.91	2.52	5.19	2.35	5.54	2.46	6	7	23
R-109 Scientific Attitude	10	5.42	2.09	5.52	2.01	5.47	2.05	6	7	23
R-110 Aeronautics & Space	10	4.35	2.39	2.58	1.62	3.44	2.22	8	9	24
R-111 Electricity, electronics	20	8.30	4.17	5.22	2.53	6.72	3.75	8	9	24
R-112 Mechanics	19	10.95	3.72	7.10	2.90	8.97	3.84	8	9	24
R-113 Farming	12	7.34	2.63	6.75	2.64	7.04	2.65	8	9	24
R-114 Home Economics	21	7.67	2.98	11.64	3.54	9.71	3.83	8	9	24
R-115 Sports	14	7.33	3.15	5.12	2.44	6.19	3.02	8	9	24
Info.Part II subscores										
R-131 Art	12	5.46	2.62	5.78	2.64	5.62	2.64	10	11	25
R-132 Law	9	4.35	1.86	3.91	1.65	4.12	1.77	--	--	--
R-133 Health	9	5.10	2.24	5.65	2.11	5.38	2.19	--	--	--
R-134 Engineering	6	2.90	1.33	2.40	1.29	2.64	1.33	--	--	--
R-135 Architecture	6	2.43	1.35	2.43	1.28	2.43	1.31	--	--	--
R-136 Journalism	3	1.47	0.99	1.49	0.98	1.48	0.98	--	--	--
R-137 Foreign travel	5	2.50	1.35	2.12	1.31	2.30	1.34	--	--	--
R-138 Military	7	2.26	1.46	1.72	1.19	1.98	1.36	--	--	--
R-139 Acct., bus., sales	10	3.96	1.92	3.98	1.85	3.97	1.88	10	11	25
R-140 Practical Knowledge	4	2.75	1.12	2.91	0.97	2.83	1.05	--	--	--
R-141 Clerical	3	1.32	0.85	1.70	0.92	1.52	0.90	--	--	--
R-142 Bible	15	6.34	3.32	6.66	3.24	6.51	3.28	10	11	25
R-143 Colors	3	1.07	0.84	1.49	0.93	1.29	0.91	--	--	--
R-144 Etiquette	2	0.80	0.69	1.06	0.74	0.93	0.72	--	--	--
R-145 Hunting	5	2.07	1.23	1.06	0.90	1.55	1.19	--	--	--
R-146 Fishing	5	1.63	1.22	0.99	0.90	1.30	1.12	--	--	--
R-147 Outdoor activities(other)	9	4.54	2.03	4.04	1.88	4.28	1.97	--	--	--
R-148 Photography	3	1.13	0.76	1.21	0.70	1.17	0.73	--	--	--
R-149 Games (sedentary)	5	2.29	1.22	1.94	1.02	2.11	1.14	--	--	--
R-150 Theater, ballet	8	3.48	1.73	4.06	1.79	3.77	1.78	--	--	--
R-151 Foods	4	1.03	0.96	1.27	1.01	1.15	0.99	--	--	--
R-152 Miscellaneous	10	4.44	1.96	4.20	1.72	4.32	1.85	--	--	--
R-162 Vocabulary II	9	5.12	2.42	5.48	2.24	5.31	2.34	4	5	22
Info.Test composite scores										
R-172 Vocab.Total (I+II)	30	16.80	6.27	16.09	5.93	16.44	6.11	4	5	22
R-190 Info. I Total	252	126.73	39.78	113.80	33.40	120.09	37.22	4	5	22
R-192 Info. II Total	143	63.32	**	62.07	**	62.65	**	--	--	--
R-100 Info. Total (I+II)	395	190.05	**	175.87	**	182.74	**	--	--	--

(continued on next page)

Table C-1 (cont.) Means and standard deviations of 15-year-old population
For 74 variables

(Based on weighted cases*)

	No.of Items	Boys Mean	σ	Girls Mean	σ	Total Mean	σ	Page nos. ("C-") for %ile tables M	F	T
R-211 Memory for Sentences	16	8.52	3.12	9.32	3.10	8.94	3.14	10	11	25
R-212 Memory for Words	24	10.03	4.95	11.70	5.46	10.89	5.29	10	11	25
R-220 Disguised Words	30	12.92	6.72	14.24	6.95	13.60	6.87	10	11	25
English Test										
R-231 Spelling	16	7.82	3.13	9.34	2.96	8.60	3.14	12	13	26
R-232 Capitalization	33	27.71	5.38	29.26	4.48	28.50	**	12	13	26
R-233 Punctuation	27	15.61	4.84	17.61	4.72	16.64	4.88	12	13	26
R-234 Usage	25	15.25	3.79	16.42	3.40	15.85	3.64	12	13	26
R-235 Effective Expression	12	7.60	2.66	8.39	2.34	8.01	2.53	12	13	26
R-230 English Total	113	73.99	15.98	81.02	14.29	77.60	15.54	12	13	26
R-240 Word Funct. in Sentences	24	8.62	4.99	10.13	5.54	9.40	5.33	12	13	26
R-250 Reading Comprehension	48	26.26	11.53	27.95	10.69	27.13	11.14	12	13	26
Miscellaneous Aptitudes										
R-260 Creativity	20	8.15	4.04	7.65	3.67	7.89	3.87	14	15	27
R-270 Mechanical Reasoning	20	11.64	4.22	8.13	3.50	9.84	4.24	14	15	27
R-281 Vis. in 2 Dimen.	24	13.11	5.83	11.25	5.61	12.15	5.79	14	15	27
R-282 Vis. in 3 Dimen.	16	8.46	3.38	7.63	3.00	8.03	3.22	14	15	27
R-290 Abstract Reasoning	15	8.40	3.21	8.28	3.14	8.34	3.18	14	15	27
Mathematics Test										
R-311 I Arith. Reasoning	16	7.78	3.56	7.40	3.45	7.59	3.51	16	17	28
R-312 II Introd. H.S. math	24	9.82	4.59	9.58	4.24	9.70	4.41	16	17	28
R-320 I + II	40	17.60	7.49	16.98	6.98	17.29	7.24	16	17	28
R-333 III Advanced	14	2.82	1.96	2.49	1.72	2.65	1.85	16	17	28
R-340 Math Total (I+II+III)	54	20.42	8.60	19.47	7.85	19.94	8.24	16	17	28
Tests of speed and accuracy										
F-410 Arith. Computation	72	21.25	26.64	27.35	21.60	24.38	24.37	18	19	29
F-420 Table Reading	72	6.08	**	8.86	**	7.51	**	18	19	29
F-430 Clerical Checking	74	17.79	**	25.09	**	21.54	**	18	19	29
F-440 Object Inspection	40	19.45	**	21.09	**	20.30	**	18	19	29
A-500 Preferences	166	58.64	**	57.66	**	58.14	**	18	19	29
A priori composites										
C-001 IQ composite	283	151.87	**	154.86	**	153.40	**	20	21	30
C-002 Gen.Acad.Apt.Comp.	829	450.40	**	469.30	**	460.10	**	20	21	30
C-003 Verbal Comp.	167	101.84	**	108.07	**	105.04	**	20	21	30
C-004 Quant. Comp.	246	89.97	**	84.36	**	87.09	**	20	21	30
C-005 Tech. Comp.	98	49.92	**	35.08	**	42.30	**	20	21	30
C-006 Sci. Apt. Comp.	1063	489.40	**	436.26	**	462.07	**	--	--	--
No. of cases		34,878		38,547		73,425				
Weighted N		787,600		832,100		1,619,700				

*Cases weighted by Weight D, to provide estimates of the population values of the means
and standard deviations (and of the percentiles shown in Tables C-2 and C-3). The cases
are those represented by the botton row in Table V-1.
**Data not available

Table C-2

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Boys

%ile	R-190	R-101	R-102	R-162	R-172	%ile	R-190	R-101	R-102	R-162	R-172
100	216-252		21		30	50	128				
99	206-215		20		29	49	127				17
98	201-205				28	48	126				
97	196-200		19			47	125			5	
96	193-195			9	27	46	124				
95	189-192					45	123				
94	187-188		18		26	44	122				16
93	184-186					43	121				
92	182-183					42	120		11		
91	180-181					41	118-119				
90	178-179				25	40	117				
89	176-177		17			39	116				
88	174-175					38	115				15
87	173					37	114				
86	171-172			8	24	36	113				
85	169-170					35	112				
84	168					34	110-111		10	4	
83	166-167		16			33	109				14
82	165					32	108				14
81	163-164				23	31	107				
80	162					30	106				
79	161					29	104-105	11			13
78	159-160					28	103				
77	158				22	27	102		9		
76	157		15			26	100-101				
75	156					25	99				
74	154-155					24	98				12
73	153			7		23	96-97				
72	152					22	95			3	
71	151				21	21	93-94		8		
70	150					20	92				11
69	148-149	12				19	90-91	10			
68	147		14			18	88-89				
67	146					17	86-87				
66	145				20	16	84-85				10
65	144					15	83		7		
64	143					14	81-82				
63	142					13	79-80	9		2	9
62	140-141					12	77-78				
61	139					11	74-76		6		
60	138			6	19	10	72-73				8
59	137		13			9	69-71				
58	136					8	67-68	8	5		
57	135					7	64-66				7
56	134					6	61-63				
55	133				18	5	57-60		4	1	6
54	132					4	53-56	7			
53	131					3	48-52		3		5
52	130					2	42-47	6		0	4
51	129		12			1	27-41	4-5	2		3
						0	0-26	0-3	0-1		0-2

*See Table C-1 (on pages C-2 and C-3) for names of tests corresponding to the test codes, and for the means, standard deviations, and numbers of cases. For other information about Tables C-2 and C-3, see page C-31.

Table C-2 (cont.)   C-5

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Girls

%ile	R-190	R-101	R-102	R-162	R-172
100	198-252		21		29-30
99	187-197		20		28
98	181-186		19		27
97	176-180				
96	173-175		18	9	26
95	169-172				
94	167-168				
93	165-166		17		25
92	162-164				
91	160-161				
90	158-159				24
89	156-157		16		
88	155				
87	153-154				
86	151-152			8	23
85	150				
84	148-149				
83	147		15		
82	145-146				22
81	144				
80	143				
79	141-142				
78	140				
77	139		14		21
76	138				
75	137				
74	136				
73	135				
72	133-134				20
71	132			7	
70	131		13		
69	130				
68	129				
67	128				
66	127				19
65	126				
64	125	12			
63	124				
62	123		12		
61					18
60	122				
59	121				
58	120				
57	119				
56	118				
55	117			6	17
54	116		11		
53	115				
52	114				
51	113				

%ile	R-190	R-101	R-102	R-162	R-172
50					
49	112				16
48	111				
47	110				
46	109		10		
45	108				
44	107				
43	106				15
42	105				
41					
40	104			5	
39	103				
38	102				14
37	101		9		
36	100				
35	99				
34	98				
33	97				
32					13
31	96				
30	95				
29	94		8		
28	93				
27	92			4	12
26	91				
25	90				
24	89				
23	88				
22	87				11
21	86		7		
20	85				
19	84	11			
18	83				
17	82				10
16	80-81			3	
15	79		6		
14	78				
13	76-77				9
12	75				
11	74				
10	72-73	10			8
9	70-71		5		
8	68-69			2	
7	65-67				7
6	63-64	9			
5	60-62		4		
4	57-59	8			6
3	52-56		3	1	5
2	46-51	7			4
1	34-45	6	2	0	3
0	0-33	0-5	0-1		0-2

*See footnote on page C-4.

Table C-2 (cont.)

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Boys

%ile	R103	R104	R105	R106	R107	R108	R109
100	23-24	13		22-23	18		10
99	22	12	24	20-21	17	11	
98	21			19			
97	20	11	23	18	16		9
96							
95	19			17		10	
94							
93		10	22	16	15		
92	18						
91				15			
90							
89	17		21		14		8
88						9	
87		9		14			
86							
85	16						
84			20	13			
83					13		
82							
81							
80	15	8		12			
79			19				
78							
77					12		
76						8	
75				11			
74	14						
73			18				
72		7					
71							
70							7
69				10	11		
68	13						
67			17				
66							
65							
64							
63				9		7	
62		6					
61	12		16		10		
60							
59							
58							6
57							
56				8			
55			15				
54							
53	11						
52					9		
51		5					
50						6	
49			14	7			
48							
47							
46							
45	10						
44			13		8		
43							
42							
41							
40				6			
39			12				5
38		4					
37						5	
36	9				7		
35							
34			11				
33							
32							
31				5			
30							
29			10				
28	8						
27					6		
26							
25		3				4	4
24			9				
23							
22							
21				4			
20	7				5		
19			8				
18							
17							
16							
15			7			3	
14	6						3
13		2		3	4		
12							
11			6				
10							
9	5						
8			5		3		
7						2	2
6				2			
5	4	1	4				
4					2		
3	3		3				1
2		0	2	1		1	
1	2		1	0	1		0
0	0-1		0	0	0	0	

*See footnote on page C-4.

Table C-2 (cont.)　　　　　　　　　　　　　　　C-7

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Girls

%ile	Raw Score R103	R104	R105	R106	R107	R108	R109
100	23-24	13	24	20-23	16-18	11	
99	22		23	18-19	15		10
98	21	12	22	17		10	
97	20			16	14		9
96	19		21				
95		11		15			
94					13	9	
93	18		20	14			
92							
91							
90	17	10	19	13	12		
89							8
88							
87	16			12			
86			18		11	8	
85							
84							
83		9		11			
82	15						
81			17				
80					10		
79							
78				10			
77	14						
76			16			7	
75							7
74		8					
73					9		
72				9			
71			15				
70	13						
69							
68							
67							
66							
65			14	8	8		
64		7					
63	12					6	
62							
61							
60							
59							
58			13	7			
57							6
56							
55					7		
54	11						
53		6					
52			12				
51							

%ile	Raw Score R103	R104	R105	R106	R107	R108	R109
50							
49				6			
48						5	
47							
46							
45	10		11		6		
44							
43							
42							
41		5					
40							
39				5			
38			10				5
37							
36	9						
35							
34					5	4	
33							
32							
31			9				
30							
29		4					
28							
27	8			4			
26							
25							
24			8		4		
23							4
22							
21							
20						3	
19	7						
18		3	7				
17				3			
16							
15							
14					3		
13			6				
12	6						3
11							
10							
9		2	5			2	
8				2			
7	5				2		
6							
5			4				2
4	4						
3	3	1	3	1		1	
2	3		2		1		1
1	2	0	1	0			
0	0-1		0	0	0	0	0

*See footnote on page C-4.

Table C-2 (cont.)

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Boys

%ile	R110	R111	R112	R113	R114	R115	%ile	R110	R111	R112	R113	R114	R115
100		20	19		16-21	14	50						
99	10	19	18	12	15		49						
98		18			14	13	48	4					
97			17				47			11			
96	9	17			13		46						7
95							45						
94		16		11			44						
93						12	43						
92		15	16		12		42		7			7	
91	8						41				7		
90							40						
89		14					39						
88							38						
87					11		37			10			
86		13	15				36						
85						11	35						6
84	7			10			34						
83							33	3	6				
82							32						
81		12					31						
80							30					6	
79					10		29				6		
78			14				28			9			
77						10	27						
76		11					26						
75	6						25						5
74							24						
73							23		5				
72							22						
71							21			8			
70				9			20				5		
69		10					19					5	
68			13		9		18	2					
67						9	17						4
66							16			7			
65							15		4				
64							14						
63	5						13						
62							12				4		
61		9					11			6		4	
60							10						3
59							9		3				
58			12				8			5			
57						8	7	1			3		
56					8		6						
55							5			4		3	2
54				8			4		2		2		
53							3	0		3			
52		8					2				1	2	1
51							1		1	1-2		1	
							0		0	0	0	0	0

*See footnote on page C-4.

Table C-2 (cont.) C-9

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Girls

%ile	Raw Score						%ile	Raw Score					
	R110	R111	R112	R113	R114	R115		R110	R111	R112	R113	R114	R115
100	8-10	14-20	15-19		20-21	12-14	50		5	7			5
99	7	12-13	14	12	19	11	49						
98			11				48						
97	6			13		18	47						
96		10		11			46						
95			12				45						
94					17		44						
93						9	43						
92	5	9					42					11	
91							41						
90			11				40	2					
89				10	16		39						
88							38					6	
87						8	37			6			
86		8					36						
85							35						4
84							34		4				
83			10				33						
82					15		32					10	
81	4						31						
80							30						
79							29						
78				9			28						
77		7				7	27				5		
76							26						
75							25			5			
74			9				24						
73					14		23					9	
72							22						
71							21						3
70							20						
69							19		3				
68							18						
67							17	1			4		
66							16					8	
65		6				6	15			4			
64				8			14						
63	3		8		13		13						
62							12						
61							11						
60							10				3	7	2
59							9		2				
58							8			3			
57							7	0					
56							6					6	
55							5				2		
54							4					5	1
53					12		3		1	2			
52							2				1	4	
51				7			1		0	1		3	0
							0			0	0	0-2	

*See footnote on page C-4.

Table C-2 (cont.)

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Boys

%ile	Raw Score						%ile	Raw Score					
	R131	R139	R142	R211	R212	R220		R131	R139	R142	R211	R212	R220
100	12	10	15	16		30	50						
99		9		15	24	29	49						12
98	11	8	14		22-23	28	48					9	
97					21	27	47						
96	10		13	14		26	46						
95					20		45						
94					19	25	44	5					
93		7	12			24	43				8		11
92				13	18		42						
91						23	41						
90	9				17		40			5			
89			11			22	39					8	
88							38						10
87					16		37						
86				12		21	36						
85							35						
84		6	10		15		34						
83						20	33		3				
82							32						9
81	8						31	4			7		
80					14	19	30					7	
79							29						
78			9				28			4			
77				11		18	27						8
76							26						
75					13		25						
74							24						
73						17	23						
72							22				6		
71							21					6	7
70	7	5	8		12		20	3					
69						16	19						
68							18						
67				10			17		2				
66							16			3			6
65						15	15						
64							14				5	5	
63					11		13						
62							12						
61		7					11	2					5
60						14	10						
59							9						
58							8			2	4	4	
57	6						7						4
56					10		6		1				
55				9		13	5					3	
54							4	1			3		3
53							3			1			2
52		4					2		0		2	2	1
51			6				1	0		0	1	1	0
							0				0	0	

*See footnote on page C-4.

Table C-2 (cont.)   C-11

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Girls

%ile	R131	R139	R142	R211	R212	R220
100	12	9-10	15			30
99				16	24	29
98	11	8	14	15		28
97						
96			13		23	27
95					22	
94	10	7		14		26
93			12		21	
92						25
91						
90					20	24
89						
88	9		11	13	19	
87						23
86						
85		6			18	
84						22
83			10			
82						
81					17	21
80						
79				12		
78	8				16	
77						20
76			9			
75						
74						19
73					15	
72						
71						
70		5				18
69						
68				11	14	
67			8			
66	7					
65						17
64						
63					13	
62						
61						16
60						
59						
58			7			
57				10	12	
56						15
55						
54						
53						
52	6	4				
51						14

%ile	R131	R139	R142	R211	R212	R220
50					11	
49						
48						
47			6			
46						13
45				9		
44						
43					10	
42						
41						
40						12
39	5					
38						
37						
36					9	
35			5			11
34				8		
33						
32		3				
31						
30						10
29						
28					8	
27	4					
26						9
25						
24						
23			4	7		
22						
21					7	8
20						
19						
18						
17	3					7
16						
15		2		6	6	
14						
13			3			6
12						
11						
10						
9	2			5	5	5
8						
7						
6			2			4
5		1		4	4	
4						3
3	1					
2			1	3	3	2
1	0	0		1-2	1-2	1
0			0	0	0	0

*See footnote on page C-4.

Table C-2 (cont.)

Percentile Corresponding to Each Raw Score on Selected TALENT Tests *
For 15-Year-Old Boys

%ile	R230	R231	R232	R233	R234	R235	R240	R250
100	104-113	16		27	24-25		23-24	48
99	102-103	15	33	26	23		22	47
98	100-101			25	22	12	21	46
97	98-99	14					20	45
96	97			24	21		19	
95	96							44
94	95	13		23			18	
93	94							43
92			32		20	11	17	
91	93							42
90	92	12		22				
89							16	
88	91							41
87							15	
86	90			21				40
85	89				19			
84		11					14	
83								39
82	88							
81				20				38
80	87					10	13	
79								
78	86							37
77			31				12	
76					18			36
75	85	10		19				
74								
73	84						11	35
72								
71								
70	83							34
69								
68				18			10	
67	82							33
66					17			
65		9				9		32
64	81							
63								
62							9	31
61	80							
60			30	17				
59								30
58	79							
57								
56								29
55	78						8	
54					16			
53			8					28
52	77			16				
51								27
50						8		
49	76							
48								26
47								
46	75		29				7	
45								25
44	74			15				
43					15			24
42								
41	73	7						
40								23
39								
38	72							22
37						7		
36	71		28	14			6	
35								21
34	70							
33					14			20
32								
31	69							
30								19
29	68	6		13				
28			27					18
27	67							
26						6		
25	66						5	17
24	65				13			
23				12				16
22	64		26					
21								15
20	63							
19	62	5						
18	61		25			5		14
17				11	12			
16	60						4	13
15	59		24					
14	58							12
13	57			10	11			
12	56		23					11
11	55	4				4		
10	53-54		22					
9	52			9	10			10
8	50-51		21				3	
7	48-49		20			3		9
6	46-47	3	19	8	9			
5	44-45		18					8
4	41-43		16-17	7	8		2	7
3	38-40	2	13-15	6	7	2		6
2	32-37		3-12	5	6		1	5
1	2-31	1	0-2	1-4	1-5	1	0	1-4
0	0-1	0		0	0	0		0

*See footnote on page C-4.

Table C-2 (cont.)   C-13

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Girls

%ile	Raw Score R230	R231	R232	R233	R234	R235	R240	R250	%ile	Raw Score R230	R231	R232	R233	R234	R235	R240	R250
100	107-113	16		27	24-25		24	48	50	83					9		
99	104-106				23		23	47	49								28
98	103	15		26			22	46	48								
97	102		33		22	12		45	47								
96	101			25			21		46	82							27
95	100							44	45		9						
94	99	14					20		44							8	
93					21				43	81			17				26
92	98			24				43	42			30					
91	97						19		41					16			
90								42	40	80							
89	96	13							39								25
88						11	18		38							8	
87				23	20			41	37	79							
86	95								36				16			7	24
85							17		35	78							
84	94							40	34								
83			32						33								23
82	93							39	32	77	8						
81				22			16		31								22
80		12							30	76				15			
79	92							38	29			29	15				
78							15		28							6	21
77					19				27	75							
76	91							37	26								
75									25	74					7		20
74				21			14		24								
73	90							36	23	73			14				19
72						10			22		7			14			
71									21	72		28					
70		11					13	35	20								18
69	89								19	71						5	
68									18								17
67				20				34	17	70			13				
66	88				18		12		16	69					6		16
65									15	68		27					
64								33	14					13			
63	87								13	67	6						15
62									12	66		26	12				14
61			31				11	32	11	65						4	
60									10	64							13
59	86			19					9	63		25	11	12	5		
58		10						31	8	61-62							12
57							10		7	60	5	24					11
56	85								6	58-59		23	10	11		3	
55								30	5	55-57		22			4		10
54									4	52-54	4	20-21	9	10			9
53	84				17				3	48-51		18-19	8	9	3	2	8
52								29	2	41-47	3	13-17	7	8			6-7
51				18			9		1	24-40	1-2	1-12	3-6	5-7	1-2	1	1-5
									0	0-23	0	0	0-2	0-4	0	0	0

*See footnote on page C-4.

Table C-2 (cont.)

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Boys

%ile	Raw Score					%ile	Raw Score				
	R-260	R-270	R-281	R-282	R-290		R-260	R-270	R-281	R-282	R-290
100	19-20			16	15	50					
99	18	20	24			49					
98	17	19	23	15	14	48					
97	16					47					
96						46				8	
95			22	14	13	45			13		
94	15	18				44					
93						43		11			
92			21			42	7				
91	14					41					8
90				13		40					
89		17				39			12		
88			20		12	38					
87	13					37					
86						36					
85						35		10		7	
84						34					
83		16	19	12		33	6		11		
82						32					
81	12					31					7
80						30					
79						29			10		
78			18			28		9			
77					11	27					
76		15				26				6	
75	11			11		25					
74						24	5		9		
73						23					6
72			17			22					
71						21		8	8		
70						20					
69						19					
68	10	14				18			7		
67						17				5	
66						16	4				5
65			16	10	10	15		7	6		
64						14					
63						13					
62						12			5		
61						11					4
60	9					10		6		4	
59		13	15			9	3		4		
58						8					
57						7		5			3
56						6			3		
55				9		5	2			3	
54						4		4	2		2
53						3					
52			14		9	2	1	3	1	2	1
51	8	12				1	0	1-2	0	1	0
						0		0		0	

*See footnote on page C-4.

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Girls

%ile	Raw Score					%ile	Raw Score				
	R-260	R-270	R-281	R-282	R-290		R-260	R-270	R-281	R-282	R-290
100	18-20	18-20	24	16	15	50					
99	17	17	23	15	14	49					
98	16	16	22	14		48					
97	15					47			11		
96		15	21	13		46	7				
95	14				13	45					
94		14	20			44				7	
93						43					
92						42					8
91	13		19	12		41		7			
90		13				40			10		
89					12	39					
88						38					
87	12		18			37					
86						36	6				
85		12		11		35			9		
84						34					
83			17			33					
82						32				6	7
81	11					31					
80			16			30		6	8		
79		11			11	29					
78						28					
77				10		27					
76						26	5				
75						25			7		
74	10					24					6
73			15			23					
72						22					
71		10				21			6		
70						20				5	
69						19		5			
68				9		18					
67			14		10	17	4		5		5
66						16					
65	9					15					
64						14					
63						13			4		
62		9				12				4	
61						11		4			4
60			13			10	3				
59						9			3		
58						8					
57						7					3
56	8			8		6		3			
55						5	2		2	3	
54					9	4					2
53			12			3			1		
52		8				2	1	2		2	1
51						1	0	1	0	1	0
						0		0		0	

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Boys

%ile	Raw Score					%ile	Raw Score				
	R-311	R-312	R-320	R-333	R-340		R-311	R-312	R-320	R-333	R-340
100	16	23-24	38-40	10-14	46-54	50					
99		22	36-37	9	42-45	49					19
98	15	21	34-35	8	40-41	48		9			
97		20	33	7	39	47					
96		19	32		38	46			16		
95	14		31		36-37	45					18
94		18		6	35	44	7				
93			30			43					
92	13	17			34	42					
91	13		29		33	41			15		
90			28			40					
89		16			32	39		8			17
88			27		31	38					
87				5		37				2	
86	12	15			30	36			14		
85			26			35					
84					29	34	6				16
83						33					
82			25			32					
81		14			28	31					
80						30		7	13		
79	11		24		27	29					15
78						28					
77		13				27					
76			23		26	26					
75				4		25	5		12		
74						24					14
73			22		25	23					
72	10					22					
71		12				21		6			
70						20			11		
69			21		24	19				1	13
68						18					
67						17					
66					23	16	4		10		
65			20			15					12
64		11				14		5			
63	9					13					
62					22	12			9		11
61			19			11					
60						10				0	
59						9	3				10
58				3	21	8		4	8		
57		10				7					
56			18			6					9
55						5			7		
54	8				20	4	2	3			8
53						3			6		7
52			17			2	1	2	5		6
51						1		1	2-4		1-5
						0	0	0	0-1		0

*See footnote on page C-4.

Table C-2 (cont.)   C-17

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Girls

%ile	R-311	R-312	R-320	R-333	R-340
100	16	22-24	36-40	9-14	43-54
99	15	20-21	34-35	7-8	39-42
98		19	32-33		37-38
97	14		31		36
96		18	30	6	35
95					34
94		17	29		33
93	13				32
92		16	28	5	
91					31
90			27		
89	12				30
88		15	26		
87					29
86			25		
85					28
84		14			
83			24		27
82	11				
81				4	
80			23		26
79		13			
78					
77					25
76			22		
75	10				
74					24
73		12			
72			21		
71					
70					23
69					
68			20		
67	9				
66		11			22
65					
64			19	3	
63					
62					21
61					
60					
59			18		
58	8	10			
57					20
56					
55					
54			17		
53					19
52					
51					

%ile	R-311	R-312	R-320	R-333	R-340
50					
49	7	9	16		
48					18
47					
46					
45					
44					
43			15		17
42				2	
41					
40					
39	6	8			
38			14		
37					16
36					
35					
34					
33					
32			13		15
31					
30			7		
29					
28	5				
27					
26			12		14
25					
24					
23					
22					
21		6	11	1	13
20					
19					
18	4				
17					12
16			10		
15					
14					
13		5			11
12			9	0	
11					
10	3				
9					10
8		4	8		
7					9
6					
5			7		8
4	2	3			
3			6		7
2	1	2	5		5-6
1		1	2-4		1-4
0	0	0	0-1		0

*See footnote on page C-4

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Boys

%ile	Raw Score					%ile	Raw Score				
	F410	F420	F430	F440	A500		F410	F420	F430	F440	A500
100	59-72	62-72	74		165-166	50			19		54
99	54-58	36-61	69-73	39-40	152-164	49	27			19	53
98	51-53	27-35	66-68	38	135-151	48		7	18		
97	50	23-26	62-65	37	125-134	47					52
96	49	22	59-61	36	117-124	46	26				
95	47-48	20-21	55-58	35	110-116	45			17		51
94		18-19	53-54	34	106-109	44	25				
93	46	17	51-52	33	101-105	43				18	50
92	45		48-50	32	97-100	42	24		16		
91	44	16	46-47		93-96	41		6			49
90	43	15	44-45	31	91-92	40			15		
89			43	30	88-90	39	23				48
88	42		41-42		86-87	38			14		
87		14	39-40	29	85	37	22			17	47
86	41		38	28	84	36					
85			37		82-83	35	21		13		46
84	40	13	36		80-81	34		5			
83	39		35	27	78-79	33			12		45
82			34		77	32	20				
81					75-76	31			11	16	44
80	38	12	33	26	74	30	19				
79			32		73	29	18	4	10		
78			31		72	28					43
77	37				71	27	17		9		
76			30	25	70	26	16		8	15	42
75	36				69	25		3			
74		11	29		68	24	15		7		41
73					67	23	14		6		40
72	35		28	24		22	13	2	5	14	
71					66	21	12				39
70	34		27		65	20	11		4		38
69		10				19	10	1	3		37
68			26	23	64	18	9		2	13	37
67	33					17	8	0	1		
66			25			16	7		0		36
65					63	15	5-6		-2-1		35
64	32			22	62	14	4	-1	-3	12	
63			24			13	2-3	-2	-4		34
62		9			61	12	0-1		-6-5	11	33
61	31		23		60	11	-2-1	-3	-7		32
60						10	-5-3	-5-4	-9-8	10	31
59	30			21	59	9	-7-6	-6	-11-10		30
58			22			8	-12-8	-8-7	-13-12	9	29
57					58	7	-17-13	-10-9	-16-14	8	28
56					57	6	-23-18	-13-11	-19-17	7	27
55	29	8	21			5	-32-24	-17-14	-23-20	5-6	25-26
54				20	56	4	-45-33	-23-18	-29-24	2-4	23-24
53			20			3	-60-46	-30-24	-36-30	0-1	21-22
52	28				55	2	-83-61	-38-31	-47-37	-4-1	16-20
51						1	-118-84	-46-39	-67-48	-14-5	9-15
						0	-216-119	-72-47	-222-68	-40-15	0-8

*See footnote on page C-4.

Table C-2 (cont.)   C-19

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Girls

%ile	F410	F420	F430	F440	A500
100	60-72	58-72	74	40	163-166
99	55-59	35-57	70-73	39	131-162
98	54	27-34	67-69	38	117-130
97	52-53	24-26	66	37	108-116
96	51	22-23	62-65	36	102-107
95	50	20-21	59-61	35	97-101
94		19	58	34	93-96
93	49	18	55-57	33	90-92
92	48		53-54	32	88-89
91	47	17	51-52		86-87
90			50	31	85
89	46	16	48-49		83-84
88			47	30	81-82
87	45	15	46		80
86			45	29	78-79
85	44		44		76-77
84			43	28	75
83	43	14	42		74
82			41		73
81	42		40	27	72
80			39		71
79		13	38		70
78	41		38		69
77					
76			37	26	68
75	40		36		67
74					
73	39	12	35		66
72					65
71			34		
70				25	64
69	38		33		
68					
67					63
66	37	11	32		
65				24	62
64			31		61
63	36				
62			30		
61					60
60	35				
59			29	23	59
58		10	28		
57	34		28		58
56					
55					57
54	33		27	22	
53					56
52					
51	32		26		55

%ile	F410	F420	F430	F440	A500
50		9			
49				21	54
48	31		25		
47					53
46			24		
45	30				
44					52
43			23	20	
42	29	8			51
41					
40	28		22		50
39					
38			21	19	49
37	27				
36					
35	26		20		48
34		7			
33	25		19	18	47
32					
31	24		18		46
30					
29			17		45
28	23	6			
27			16	17	44
26	22				
25	21		15		43
24			14		
23	20				
22	19	5	13	16	42
21					41
20	18		12		
19	17		11		40
18	16	4	10	15	
17	15		9		39
16	14		8		38
15	13	3	7	14	
14	12		6		37
13	10-11		5		36
12	9	2	3-4	13	35
11	7-8		2		
10	5-6	1	0-1	12	34
9	2-4	0	-1		33
8	0-1		-3-2	11	32
7	-2-1	-1	-5-4		30-31
6	-6-3	-2	-8-6	10	29
5	-11-7	-3	-11-9	9	28
4	-18-12	-6-4	-15-12	7-8	26-27
3	-29-19	-9-7	-20-16	4-6	23-25
2	-50-30	-16-10	-28-21	0-3	20-22
1	-86-51	-36-17	-46-29	-7-1	11-19
0	-216-87	-72-37	-222-47	-40-8	0-10

*See footnote on page C-4.

Table C-2 (cont.)

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Boys

%ile	C-001	C-002	C-003	C-004	C-005
100	265-283	74-82	152-167	209-246	90-98
99	256-264	72-73	147-151	191-208	86-89
98	251-255	70-71	144-146	181-190	84-85
97	246-250	69	141-143	173-180	82-83
96	243-245	67-68	140	167-172	80-81
95	239-242	66	137-139	162-166	79
94	236-238	65	136	158-161	77-78
93	233-235		135	154-157	76
92	231-232	64	134	150-153	75
91	228-230	63	133	147-149	74
90	226-227	62	132	144-146	73
89	224-225		131	141-143	72
88	221-223	61	130	139-140	71
87	219-220		129	136-138	70
86	217-218	60	128	134-135	69
85	215-216	59	127	131-133	
84	213-214		126	129-130	68
83	211-212	58	125	127-128	67
82	209-210		124	126	
81	207-208	57		124-125	66
80	205-206		123	122-123	65
79	203-204		122	120-121	
78	201-202	56	121	119	64
77	200			117-118	63
76	198-199	55	120	115-116	
75	196-197		119	113-114	62
74	194-195	54		112	
73	193		118	110-111	61
72	191-192		117	109	
71	189-190	53		108	60
70	187-188		116	106-107	
69	186	52	115	105	59
68	184-185			104	
67	182-183		114	102-103	58
66	181	51		101	
65	179-180		113	100	57
64	177-178		112	98-99	
63	175-176	50		97	56
62	174		111	96	
61	172-173	49		95	55
60	170-171		110	94	
59	169			92-93	54
58	167-168	48	109	91	
57	166		108	90	53
56	164-165			89	
55	162-163	47	107	88	52
54	160-161			87	
53	159		106	86	51
52	157-158	46	105	85	
51	156			84	

%ile	C-001	C-002	C-003	C-004	C-005
50	154-155		104	83	50
49	152-153	45		82	
48	150-151		103	81	49
47	149		102	80	
46	147-148	44		79	48
45	145-146		101	78	
44	143-144	43			47
43	142		100	77	
42	140-141		99	76	46
41	138-139	42		75	
40	137		98	74	45
39	135-136		97	73	
38	133-134			72	44
37	131-132	41	96	71	
36	130		95	70	43
35	128-129	40			
34	126-127		94	69	42
33	124-125	39	93	68	
32	122-123			67	41
31	120-121		92	66	
30	118-119	38	91		40
29	116-117		90	65	
28	114-115	37		64	39
27	112-113		89	63	
26	110-111		88	62	38
25	108-109	36	87	61	
24	106-107		86	60	37
23	104-105	35	85		36
22	102-103			59	
21	99-101	34	84	58	35
20	97-98		83	57	
19	94-96	33	81-82	56	34
18	92-93		80	55	33
17	90-91	32	79	54	
16	88-89		78	53	32
15	85-87	31	76-77	52	31
14	83-84	30	75	51	
13	80-82		74	50	30
12	77-79	29	72-73	49	29
11	75-76	28	71	47-48	28
10	72-74		69-70	46	27
9	70-71	27	67-68	44-45	26
8	67-69	26	64-66	43	25
7	64-66	25	62-63	41-42	24
6	61-63	24	58-61	39-40	23
5	57-60	23	55-57	37-38	22
4	52-56	22	53-54	34-36	20-21
3	47-51	21	49-52	31-33	19
2	40-46	19-20	43-48	25-30	16-18
1	25-39	12-18	26-42	12-24	12-15
0	0-24	0-11	0-25	0-11	0-11

*See footnote on page C-4.

Table C-2 (cont.)   C-21

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Old Girls

%ile	C-001	C-002	C-003	C-004	C-005
100	263-283	73-77	154-167	192-246	70-98
99	254-262	71-72	149-153	173-191	64-69
98	248-253	69-70	146-148	164-172	61-63
97	244-247	68	144-145	157-163	59-60
96	240-243	67	142-143	152-156	58
95	237-239	66	141	148-151	56-57
94	235-236	65	139-140	145-147	55
93	232-234	64	138	141-144	54
92	230-231		137	138-140	53
91	227-229	63	136	135-137	52
90	225-226		135	133-134	51
89	223-224	62	134	130-132	
88	221-222	61	133	128-129	50
87	219-220		132	126-127	49
86	217-218	60	131	124-125	
85	215-216			122-123	48
84	213-214		130	120-121	47
83	211-212	59	129	118-119	
82	209-210			116-117	46
81	207-208	58	128	115	
80	205-206		127	113-114	45
79	203-204	57	126	112	
78	202			110-111	44
77	200-201		125	109	
76	198-199	56		107-108	43
75	197		124	106	
74	195-196		123	104-105	
73	193-194	55		103	42
72	192		122	102	
71	190-191	54	121	100-101	41
70	188-189			99	
69	187		120	98	
68	185-186	53		96-97	40
67	184		119	95	
66	182-183			94	39
65	181	52	118	93	
64	179-180			92	
63	177-178		117	91	38
62	176	51		90	
61	174-175		116	89	
60	172-173			88	37
59	171	50	115	87	
58	169-170		114	86	
57	168			85	36
56	166-167	49	113	84	
55	165			83	
54	163-164		112	82	35
53	162	48		81	
52	160-161		111		
51	159			80	34
50	157-158		110	79	
49	155-156	47		78	
48	154		109	77	
47	152-153			76	
46	151	46	108	75	33
45	149-150		107		
44	147-148			74	32
43	146	45	106	73	
42	144-145			72	
41	142-143		105	71	
40	141	44			31
39	139-140		104	70	
38	137-138		103	69	
37	135-136	43		68	30
36	134		102	67	
35	132-133				
34	131	42	101	66	
33	129-130		100	65	29
32	127-128			64	
31	125-126	41	99		
30	123-124		98	63	28
29	122			62	
28	120-121	40	97	61	
27	118-119		96		
26	116-117	39		60	27
25	114-115				
24	112-113		95	59	
23	110-111	38	94	58	
22	108-109		93	57	26
21	106-107	37	92	56	
20	104-105		91	55	25
19	102-103		90	54	
18	100-101	36	89	53	
17	97-99		88	52	24
16	95-96	35	87	51	
15	93-94		86	50	23
14	90-92	34	85	49	
13	88-89		84	48	
12	85-87	33	82-83	47	22
11	82-84	32	81	46	
10	80-81		79-80	45	21
9	77-79	31	78	43-44	
8	73-76	30	76-77	42	20
7	70-72	29	74-75	40-41	19
6	67-69	28	71-73	38-39	
5	63-66	27	68-70	36-37	18
4	58-62	26	64-67	33-35	17
3	52-57	24-25	59-63	30-32	15-16
2	45-51	21-23	52-58	25-29	13-14
1	29-44	15-20	35-51	13-24	10-12
0	0-28	0-14	0-34	0-12	0-9

*See footnote on page C-4.

Table C-3

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Olds (boys and girls combined)

%ile	R190	R101	R102	R162	R172
100	211-252		21		29-30
99	200-210		20		28
98	193-199		19		
97	188-192				27
96	185-187			9	
95	181-184		18		26
94	179-180				
93	176-178				
92	173-175				25
91	171-172		17		
90	169-170				
89	167-168				
88	165-166				24
87	164				
86	162-163		16	8	
85	160-161				
84	159				23
83	157-158				
82	156				
81	154-155				
80	153		15		
79	151-152				22
78	150				
77	149				
76	147-148				
75	146				
74	145				
73	144				21
72	142-143		14	7	
71	141				
70	140				
69	139				20
68	138				
67	137				
66	136	12			
65	135		13		
64	134				
63	132-133				
62	131				19
61	130				
60	129				
59	128				
58	127				18
57	126		12	6	
56	125				
55	124				
54	123				
53	122				
52	121				17
51	120				

%ile	R190	R101	R102	R162	R172
50	119				
49	118				
48	117		11		
47	116				
46	115				16
45	114				
44	113				
43	112			5	
42	111				
41	110				15
40	109		10		
39	108				
38	107				
37	106				
36	105				14
35	104				
34	103				
33	102				
32	101		9		
31	100				
30	99			4	13
29	98				
28	97				
27	96				
26	95				
25	93-94		8		12
24	92	11			
23	91				
22	90				
21	89				11
20	87-88				
19	86			3	
18	85		7		
17	83-84				
16	82				10
15	80-81				
14	79	10			
13	77-78		6		9
12	76				
11	74-75				
10	72-73	9		2	8
9	70-71				
8	67-69		5		
7	65-66				
6	62-64	8			7
5	59-61		4		6
4	55-58			1	
3	50-54	7	3		5
2	44-49				4
1	31-43	5-6	2	0	3
0	0-30	0-4	0-1		0-2

*See footnote on page C-4.

Table C-3 (cont.)　　　　　　　　C-23

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Olds (boys and girls combined)

%ile	R103	R104	R105	R106	R107	R108	R109	%ile	R103	R104	R105	R106	R107	R108	R109
100	24	13	24	22-23	18		10	50							
99	22-23	12		20-21	17	11		49							
98	21		23	18-19	16			48							
97	20			17		10	9	47							
96		11	22		15			46		5			7		
95	19			16				45	10		12	6			
94								44							
93	18		21	15	14			43						5	
92								42							
91		10				9		41							
90	17			14				40							
89			20		13		8	39			11				5
88								38							
87				13				37					6		
86	16							36	9						
85		9						35				5			
84			19		12			34							
83				12				33		4	10				
82						8		32							
81	15							31							
80								30							
79			18	11				29						4	
78					11			28							
77		8						27	8		9		5		
76	14							26							
75							7	25							
74			17	10				24				4			4
73								23							
72								22			8				
71					10			21		3					
70						7		20							
69	13		16					19	7						
68		7		9				18					4		
67								17			7			3	
66								16							
65								15				3			
64								14							
63			15		9			13	6						
62	12							12			6				3
61				8				11		2			3		
60								10							
59								9							
58								8	5		5			2	
57		6	14			6		7				2			
56							6	6							2
55					8			5	4		4		2		
54	11							4		1					
53				7				3			3	1		1	
52								2	3				1		1
51			13					1	2	0	1-2	0			
								0	0-1		0		0	0	0

*See footnote on page C-4.

Table C-3 (cont.)

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Olds (boys and girls combined)

%ile	R110	R111	R112	R113	R114	R115	%ile	R110	R111	R112	R113	R114	R115
		Raw Score							Raw Score				
100	10	20	19		20-21	14	50						
99		18-19	18	12	19	13	49		6				
98	9	17	17		18		48	3					
97		16			17		47						
96		15	16			12	46				7		
95	8	14		11			45					9	
94					16		44						
93		13	15				43			8			
92						11	42						
91	7						41						
90		12					40						
89			14		.15		39						
88							38						5
87		11				10	37		5				
86	6			10			36						
85					14		35						
84							34				6	8	
83		10	13				33			7			
82							32						
81						9	31						
80							30						
79					13		29	2					
78							28						
77	5	9	12				27						
76							26					7	4
75							25		4				
74				9			24			6			
73							23				5		
72					12	8	22						
71							21						
70		8					20						
69			11				19						
68							18					6	
67							17						
66							16			5			3
65	4						15				4		
64					11		14		3				
63							13						
62						7	12	1					
61			10				11					5	
60		7		8			10			4			
59							9				3		
58							8						
57							7		2				2
56							6					4	
55					10		5	0		3			
54							4				2		
53							3					3	1
52			9				2						
51						6	1		1	2	1	2	0
							0		0	1	0	0-1	

*See footnote on page C-4.

Table C-3 (cont.)   C-25

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Olds (boys and girls combined)

%ile	R131	R139	R142	R211	R212	R220	%ile	R131	R139	R142	R211	R212	R220
100	12	9-10	15	16		30	50				9		13
99					24	29	49			6		10	
98	11	8	14	15		28	48						
97					23	27	47						
96			13		22		46						
95	10			14	21	26	45						12
94		7					44						
93			12		20	25	43						
92							42	5					
91					19	24	41					9	
90				13			40						
89	9		11			23	39						11
88					18		38				8		
87							37			5			
86						22	36						
85		6			17		35						
84							34						10
83			10			21	33					8	
82				12	16		32		3				
81							31						
80	8					20	30						
79							29	4					9
78					15		28						
77			9			19	27				7		
76							26					7	
75							25			4			
74					14		24						8
73				11		18	23						
72							22						
71							21						
70		5					20						
69			8		13	17	19						7
68	7						18	3			6	6	
67							17						
66							16		2				
65						16	15			3			
64							14						6
63					12		13						
62							12					5	
61				10			11				5		
60						15	10	2					5
59			7				9						
58							8						
57					11		7			2		4	4
56							6				4		
55	6					14	5		1				
54							4	1				3	3
53							3				3		
52		4					2		0	1	2	2	2
51							1	0			1	1	1
							0			0	0	0	0

*See footnote on page C-4.

Table C-3 (cont.)

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Olds (boys and girls combined)

%ile	Raw Score							
	R230	R231	R232	R233	R234	R235	R240	R250
100	106-113	16		27	24-25		24	48
99	103-105			26	23		22-23	47
98	102	15	33		22	12		46
97	100-101			25			21	45
96	99	14						
95	98				21		20	44
94				24				
93	97						19	43
92	96							
91		13					18	
90	95			23		11		42
89					20			
88	94						17	41
87			32					
86	93							
85		12		22			16	40
84	92							
83								39
82	91						15	
81					19			
80				21				38
79	90						14	
78								
77	89							37
76		11				10		
75							13	
74	88			20				36
73								
72								35
71	87				18		12	
70								
69			31					34
68	86							
67				19			11	
66		10						33
65	85							
64								
63								32
62	84						10	
61								
60						9		31
59	83			18	17			
58								
57								30
56	82						9	
55								
54		9						29
53	81							
52								
51	80			17				28
50			30					
49							8	
48	79							27
47					16			
46								
45	78							26
44				16		8		
43								
42	77	8						25
41							7	
40								24
39	76							
38								
37	75		29					23
36				15	15			
35								
34	74							22
33								
32	73						6	
31		7				7		21
30	72							
29				14				20
28			28					
27	71				14			
26								19
25	70							
24								18
23	69			13				
22	68		27				5	17
21		6						
20	67					6		
19	66				13			16
18								
17	65		26	12				15
16	64							
15	63							14
14	62							
13	61	5	25	11	12	5	4	13
12	60							
11	59		24					12
10	58							
9	57		23	10	11			11
8	55-56	4				4		
7	53-54		22				3	10
6	51-52		21	9	10			
5	49-50		19-20			3		9
4	45-48	3	18	8	9			8
3	41-44		15-17	7	8		2	7
2	36-40	2	8-14	6	7	2	1	6
1	9-35	1	1-7	1-5	2-6	1	0	1-5
0	0-8	0	0	0	0-1	0		0

*See footnote on page C-4.

Table C-3 (cont.)   C-27

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Olds (boys and girls combined)

%ile	R-260	R-270	R-281	R-282	R-290	%ile	R-260	R-270	R-281	R-282	R-290
100	19-20	20		16	15	50					
99	17-18	19	24	15	14	49					
98	16		23			48					
97		18	22	14		47					
96	15					46			12		
95					13	45		9			
94		17	21			44	7				
93	14			13		43					
92						42					8
91		16	20			41					
90						40			11	7	
89	13					39					
88					12	38					
87			19	12		37		8			
86		15				36					
85						35			10		
84	12					34	6				
83			18			33					
82						32					7
81		14				31					
80				11		30			9		
79						29				6	
78	11		17		11	28		7			
77						27					
76						26					
75		13				25	5		8		
74						24					
73						23					6
72			16			22			7		
71	10			10		21					
70						20		6			
69		12				19				5	
68						18			6		
67						17	4				5
66			15		10	16					
65						15					
64						14			5		
63	9					13		5			
62				9		12					
61		11				11			4	4	4
60			14			10	3				
59						9					
58						8		4	3		
57						7					3
56						6					
55						5	2		2	3	
54	8	10				4		3			2
53			13		9	3					
52						2	1	2	1	2	1
51				8		1	0	1	0	1	0
						0		0		0	

*See footnote on page C-4.

Table C-3 (cont.)

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Olds (boys and girls combined)

%ile	R-311	R-312	R-320	R-333	R-340
100	16	23-24	37-40	10-14	45-54
99	15	21-22	35-36	8-9	41-44
98		20	33-34	7	39-40
97		19	32		37-38
96	14		31		36
95		18		6	35
94			30		34
93		17	29		33
92	13				
91			28		32
90		16			
89			27	5	31
88					30
87	12	15	26		
86					29
85					
84			25		
83		14			28
82					
81	11		24		27
80					
79					
78		13	23	4	26
77					
76					
75			22		25
74	10				
73					
72		12			24
71			21		
70					
69					
68					23
67			20		
66					
65	9	11			
64					22
63					
62			19		
61				3	
60					21
59					
58			18		
57		10			
56	8				20
55					
54					
53			17		
52					
51					19

%ile	R-311	R-312	R-320	R-333	R-340
50					
49		9			
48			16		
47	7				
46					18
45					
44					
43					
42			15		
41					17
40				2	
39		8			
38					
37	6		14		
36					16
35					
34					
33					
32					
31			13		
30		7			15
29					
28					
27					
26	5		12		
25					14
24					
23					
22					
21		6	11		
20				1	13
19					
18					
17	4				
16			10		12
15					
14					
13		5			
12			9		11
11				0	
10					
9	3				10
8		4	8		
7					
6					9
5			7		
4	2	3			8
3			6		7
2	1	2	5		5-6
1		1	2-4		1-4
0	0	0	0-1		0

*See footnote on page C-4.

Table C-3 (cont.)   C-29

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Olds (boys and girls combined)

%ile	F410	F420	F430	F440	A500
100	59-72	59-72	74		165-166
99	55-58	35-58	70-73	39-40	142-164
98	53-54	27-34	66-69	38	127-141
97	51-52	23-26	63-65	37	116-126
96	50	21-22	61-62	36	109-115
95	49	20	58-60	35	104-108
94	48	19	55-57	34	99-103
93	47	18	53-54	33	95-98
92		17	51-52	32	92-94
91	46		49-50		89-91
90		16	47-48	31	87-88
89	45		46	30	85-86
88	44	15	45		84
87			43-44	29	82-83
86	43		42		80-81
85		14	41	28	79
84	42		40		77-78
83			39		76
82	41		38	27	75
81		13			73-74
80	40		37		72
79			36		71
78			35	26	70
77	39				
76		12	34		69
75	38				68
74			33		67
73			32	25	
72	37				66
71			31		65
70		11			
69	36		30		64
68				24	
67					
66	35		29		63
65					62
64			28	23	
63	34	10			61
62			27		
61					60
60	33				
59			26	22	59
58					
57	32		25		58
56		9			57
55					
54	31		24	21	56
53					
52					55
51	30		23		

%ile	F410	F420	F430	F440	A500
50					54
49			22		
48	29	8		20	53
47					
46	28		21		52
45					
44			20		
43	27			19	51
42					
41	26	7	19		50
40					
39			18		49
38	25			18	
37			17		48
36	24				
35			16		47
34	23	6			
33					46
32			15	17	
31	22				45
30	21		14		
29					44
28	20	5	13		
27			12	16	
26	19				43
25			11		
24	18				42
23	17	4	10		
22	16		9	15	41
21	15		8		40
20		3			
19	14		7		39
18	13		6	14	38
17	12	2	5		
16	10-11		4		37
15	9	1	2-3	13	36
14	8		1		
13	6-7	0	0		35
12	4-5		-1	12	34
11	2-3	-1	-3-2		33
10	0-1		-4	11	32
9	-2-1	-2	-6-5		31
8	-5-3	-3	-8-7	10	30
7	-9-6	-5-4	-11-9	9	29
6	-14-10	-7-6	-14-12	8	28
5	-20-15	-10-8	-17-15	7	26-27
4	-30-21	-14-11	-22-18	5-6	24-25
3	-46-31	-21-15	-28-23	2-4	22-23
2	-69-47	-32-22	-38-29	-1-+1	18-21
1	-103-70	-43-33	-58-39	-12-2	10-17
0	-216-104	-72-44	-222-59	-40-13	0-9

*See footnote on page C-4.

Percentile Corresponding to Each Raw Score on Selected TALENT Tests*
For 15-Year-Olds (boys and girls combined)

%ile	Raw Score					%ile	Raw Score				
	C-001	C-002	C-003	C-004	C-005		C-001	C-002	C-003	C-004	C-005
100	264-283	74-82	153-167	202-246	88-98	50	156		107	81	40
99	255-263	71-73	148-152	183-201	83-87	49	154-155	46		80	
98	249-254	69-70	145-147	173-182	79-82	48	152-153		106	79	
97	245-248	68	143-144	166-172	77-78	47	151			78	39
96	242-244	67	141-142	160-165	74-76	46	149-150	45	105	77	
95	238-241	66	139-140	155-159	73	45	147-148			76	38
94	236-237	65	138	151-154	71-72	44	146		104		
93	233-235		137	147-150	69-70	43	144-145	44	103	75	37
92	230-232	64	136	144-146	68	42	142-143			74	
91	228-229	63	135	141-143	67	41	140-141		102	73	
90	225-227	62	133-134	138-140	65-66	40	139	43		72	36
89	223-224		132	136-137	64	39	137-138		101	71	
88	221-222	61		133-135	63	38	135-136		100	70	35
87	219-220		131	131-132	62	37	134	42			
86	217-218	60	130	129-130	61	36	132-133		99	69	
85	215-216		129	127-128		35	130-131		98	68	34
84	213-214	59	128	125-126	60	34	128-129	41		67	
83	211-212		127	123-124	59	33	127		97	66	33
82	209-210	58		121-122	58	32	125-126	40	96		
81	207-208		126	119-120	57	31	123-124			65	
80	205-206	57	125	117-118		30	121-122		95	64	32
79	203-204			116	56	29	119-120	39	94	63	
78	202		124	114-115	55	28	117-118		93		31
77	200-201	56	123	112-113		27	115-116			62	
76	198-199			111	54	26	113-114	38	92	61	
75	196-197	55	122	109-110	53	25	111-112		91	60	30
74	195		121	108		24	109-110	37	90	59	
73	193-194			107	52	23	107-108			58	29
72	191-192	54	120	105-106	51	22	105-106	36	89		
71	190		119	104		21	103-104		88	57	28
70	188-189			102-103	50	20	101-102	35	87	56	
69	186-187	53	118	101		19	98-100		86	55	
68	185			100	49	18	96-97	34	85	54	27
67	183-184	52	117	99		17	93-95		84	53	
66	181-182		116	97-98	48	16	91-92	33	83	52	26
65	180			96		15	89-90		81-82	51	
64	178-179	51	115	95	47	14	86-88	32	80	50	25
63	176-177			94	46	13	84-85		79	49	
62	175		114	93		12	81-83	31	77-78	48	24
61	173-174	50		92	45	11	78-80	30	76	47	
60	171-172		113	91		10	76-77		74-75	45-46	23
59	170		112	90		9	73-75	29	72-73	44	22
58	168-169	49		89	44	8	70-72	28	70-71	42-43	
57	167		111	87-88		7	67-69	27	67-69	41	21
56	165-166			86	43	6	64-66	26	64-66	39-40	20
55	164	48	110	85		5	60-63	25	61-63	36-38	19
54	162-163				42	4	55-59	23-24	57-60	34-35	18
53	160-161		109	84		3	49-54	22	52-56	31-33	17
52	159	47		83	41	2	43-48	19-21	46-51	25-30	15-16
51	157-158		108	82		1	28-42	14-18	29-45	13-24	11-14
						0	0-27	0-13	0-28	0-12	0-10

*See footnote on page C-4

EXPLANATORY NOTES FOR PERCENTILE CONVERSION TABLES

1. Tables C-2 and C-3 are based on the same cases as Table C-1.

2. Unlike most tables, these percentile conversion tables are to be read from right to left. They are designed primarily to tell the percentile corresponding most closely to each raw score, rather than the raw score corresponding most closely to each percentile. Therefore to find the percentile corresponding to a given raw score, the raw score is located in the appropriate column of the table and the corresponding percentile is then read from the column to the left of the bank of raw scores.

3. The nearest percentile is given for every raw score. The stated percentile value represents the midpoint of the interval. Thus, for instance, any percentile value computed to lie between 63.50 and 64.50 would be called a percentile of 64. The percentile value 50 represents the range from 49.50 to 50.50.

4. In accordance with the procedure stated in Paragraph 3 above, a percentile of "100" means anything above 99.50.

5. Similarly, a percentile of "0" means anything below 0.50.

A P.P E N D I X D

RESPONSES OF 15-YEAR-OLDS TO 100 SELECTED ITEMS
OF STUDENT INFORMATION BLANK

Percentage distributions by grade and sex
(with cases in sample weighted to provide estimates of percentages
for the total 15-year-old population in the U.S.)

EXPLANATORY NOTES

1. This appendix contains the distributions of responses of 15-year-olds to 100 selected items from the Student Information Blank (SIB). Separate distributions are presented for boys and girls, at each grade level, and for those 15-year-olds not in school.

2. Because of the limitations on computer programing, options to all questions have been designated numerically rather than alphabetically.

3. Each cell shows the estimated proportion of those in the grade giving a response to the item who marked that particular option. These proportions are given to three decimal places with the decimal point omitted. These estimated proportions were obtained by applying School Weight D. (See Chapter II, Section C, for an explanation of these weights.) Those omitting the item were not included in the base, in computing the proportions selecting each option. Thus the sum of proportions in each line add up to 1.000 if only the numbered options are included.

4. The column headed "N" is roughly proportional to the total number of 15-year-olds in the population who are represented by the respondents to the question. Note that the 15-year-olds represented by those who omitted the items are not included in N.

5. The column headed "X" indicates the ratio of those who omitted the question to those who answered the question. This figure, like the proportions marking the options, is given to three decimal places, with the decimal point omitted. Thus if the figure in Column X is 100, it means that approximately one-tenth as many 15-year-olds omitted the question as responded to it. Likewise, if the Column X figure were 3000 it would mean that approximately three times as many 15-year-olds omitted the question as responded.

6. Each line is labeled with the corresponding grade except that the line marked "5" is for 15-year-olds not in school, and the line marked "6" is for 15-year-olds in Grade 6 and below.

7. The column headed "M" contains the mean of the distributions. Means are computed on the basis of the option numbers and expressed in terms of the option number scale. In cases where the option numbers do not constitute any sort of ordinal scale, means are not presented, since such values would be wholly meaningless.

8. The actual numbers of 15-year-olds in Project Talent on whom these data are based are as follows:

	Boys	Girls
Out of school	4	6
Grade 6 and below	10	2
" 7	37	26
" 8	217	120
" 9	13,724	12,591
" 10	19,924	24,517
" 11	911	1,242
" 12	36	34
Total	34,863	38,538

9. The Student Information Blank contained the following directions:

"These questions are about yourself, your family, and your plans for the future. This is not a test, and there are no right or wrong answers. Answer each question sincerely and thoughtfully as it applies to you. In no way will your answers affect your grades in school. All answers are strictly confidential.

"Answer every question. For each question you are to mark one answer and only one answer. Be sure to read each question carefully, and then mark your answer in the appropriate space on your answer sheet. Some of the questions may be difficult for you to answer. Do not spend too much time on these questions, but mark the one best answer, and go on to the next question. You should have enough time to answer all the questions if you move along steadily."

56. How many books have you read (not including those required for school) in the past 12 months? Don't count magazines or comic books.

1. None
2. 1 to 5
3. 6 to 10
4. 11 to 15
5. 16 to 20
6. 21 or more

Boys

	1	2	3	4	5	6	X	N	M
5		517			234	249		8550	3.698
6	225	542	114		119		108	18530	2.247
7	160	277	216	161		186		78630	3.122
8	119	359	166	64	139	154	30	437570	3.205
9	166	388	181	98	64	104	16	2880853	2.818
10	143	392	186	98	63	117	15	4124052	2.898
11	121	370	195	103	67	144	22	159769	3.058
12	92	373	153	142	43	197	22	5799	3.262

Girls

	1	2	3	4	5	6	X	N	M
5	335	335	171		159			12950	2.313
6			518			482		4270	4.447
7	118	343	206	38	118	176		52080	3.223
8	182	338	141	132	58	148	18	258360	2.992
9	103	364	188	116	86	143	13	2624940	3.148
10	80	372	198	118	89	143	13	5012322	3.191
11	69	335	217	135	98	145	14	225479	3.294
12	57	275	159	214	210	85		5759	3.501

Items 65-82. For the following statements indicate how often each one applies to you. Please answer the questions sincerely. Your answers will not affect your grades in any way. Mark one of the following choices for each statement.

65. I do a little more than the course requires.

1. Almost always
2. Most of the time
3. About half the time
4. Not very often
5. Almost never

Boys

	1	2	3	4	5	X	N	M
5		500	500			934	4420	2.500
6	108	108	413	166	206		20530	3.254
7	164	142	244	291	159	28	76520	3.139
8	83	218	272	285	142	40	433190	3.184
9	80	166	268	341	145	18	2874299	3.304
10	94	171	267	345	122	15	4123420	3.230
11	133	166	261	306	134	15	160779	3.142
12	213	159	277	297	54		5929	2.821

Girls

	1	2	3	4	5	X	N	M
5	171			665	164		12950	3.653
6	518	482					4270	1.482
7	87	510	135	136	132	87	47920	2.715
8	66	163	283	323	165	46	251300	3.358
9	78	192	274	348	108	14	2620719	3.215
10	88	192	293	336	91	14	5005723	3.149
11	122	240	279	280	78	15	225226	2.951
12	160	176	312	209	143		5759	2.997

Note--See page D-2 (Notes To Appendix D)

66. I have a difficult time expressing myself in written reports, examinations, and assignments.

    1. Almost always   4. Not very often
    2. Most of the time   5. Almost never
    3. About half the time

Boys

	1	2	3	4	5	X	N	M
5		337		663		305	6550	3.325
6	311	108	366	108	108		20530	2.594
7	122	218	215	361	84	27	76570	3.068
8	159	187	267	240	147	24	440370	3.028
9	143	184	224	292	157	19	2872567	3.136
10	119	167	204	321	190	17	4114111	3.295
11	97	165	137	354	247	22	159683	3.489
12	38	69	164	301	428		5929	4.011

Girls

	1	2	3	4	5	X	N	M
5	171		164	330	335		12950	3.659
6	482	518					4270	1.518
7	147	392	99	301	60	254	41540	2.735
8	165	252	189	266	128	55	249190	2.939
9	127	189	207	309	168	14	2620627	3.201
10	110	169	203	322	195	14	5006310	3.323
11	95	145	147	346	267	10	226279	3.545
12	93	117	100	255	435		5759	3.824

67. Being a fast reader helps me complete my lessons quickly.

    1. Almost never   4. Most of the time
    2. Not very often   5. Almost always
    3. About half the time

Boys

	1	2	3	4	5	X	N	M
5				675	325	305	6550	4.325
6	119	352	230	114	184	108	18530	2.891
7	266	225	306	143	60	87	72350	2.505
8	148	228	245	246	133	27	438830	2.988
9	156	240	216	226	161	45	2799872	2.995
10	145	244	195	223	193	43	4011010	3.075
11	104	200	193	252	250	37	157434	3.345
12	159	195	198	36	412		5929	3.346

Girls

	1	2	3	4	5	X	N	M
5	500	159		171	171		12950	2.354
6				518	482		4270	4.482
7	89	286	177	310	138	89	47810	3.122
8	158	219	207	256	160	26	256360	3.039
9	129	226	193	249	203	34	2570118	3.169
10	118	230	189	252	211	33	4916814	3.207
11	112	180	180	250	278	32	221540	3.402
12	210	79	132	277	302		5759	3.383

68. My grades reflect my ability fairly accurately.

1. Almost never
2. Not very often
3. About half the time

4. Most of the time
5. Almost always

Boys

	1	2	3	4	5	X	N	M
5	337		337	325		305	6550	2.650
6		301	318	323	58		20530	3.139
7	71	228	361	257	83	26	76630	3.053
8	110	218	290	265	117	33	436380	3.061
9	112	210	277	268	133	31	2837967	3.098
10	120	223	255	275	128	25	4084169	3.068
11	116	237	232	271	144	29	158588	3.089
12	137	280	156	312	115	46	5669	2.987

Girls

	1	2	3	4	5	X	N	M
5	164	171		500	164		12950	3.330
6	518				482		4270	2.930
7		343	142	361	154	194	43600	3.326
8	141	244	264	232	119	71	245500	2.944
9	62	171	260	333	175	30	2579901	3.387
10	66	174	253	339	168	25	4954864	3.369
11	64	171	253	347	165	28	222329	3.377
12	21	135	80	350	414		5759	4.001

69. I make sure that I understand what I am to do before I start an assignment.

1. Almost never
2. Not very often
3. About half the time

4. Most of the time
5. Almost always

Boys

	1	2	3	4	5	X	N	M
5			663		337	305	6550	3.675
6		205	311	210	274		20530	3.553
7	57	155	128	431	229	57	74400	3.619
8	95	86	271	291	257	37	434720	3.529
9	47	101	198	365	288	25	2855485	3.746
10	34	84	189	394	298	22	4096047	3.839
11	30	61	139	381	389	21	159868	4.039
12	42	56	76	324	501		5929	4.186

Girls

	1	2	3	4	5	X	N	M
5	164	506			330		12950	2.825
6			482	518			4270	3.518
7	46	261	216	188	288	87	47910	3.412
8	85	77	185	341	312	29	255470	3.717
9	24	61	147	393	375	19	2609034	4.035
10	16	52	145	410	377	17	4993885	4.081
11	20	45	125	401	409	13	225640	4.133
12	73	21	85	319	503		5759	4.157

Note--See page D-2 (Notes To Appendix D)

70. I seem to accomplish very little compared to the amount of time I spend studying.

    1. Almost always
    2. Most of the time
    3. About half the time
    4. Not very often
    5. Almost never

Boys

	1	2	3	4	5	X	N	M
5	500		500			934	4420	2.000
6		418	205	377			20530	2.958
7	164	250	179	256	151	28	76520	2.981
8	140	174	297	249	141	23	440410	3.077
9	88	176	242	321	173	44	2802920	3.316
10	73	138	214	373	202	34	4046778	3.493
11	66	118	156	395	264	27	158979	3.672
12		94	152	465	289		5929	3.950

Girls

	1	2	3	4	5	X	N	M
5		330	171	335	164		12950	3.334
6	518				482		4270	2.930
7	91	433	233	188	55	137	45810	2.683
8	162	220	322	194	102	58	248560	2.856
9	91	171	227	351	160	37	2561877	3.317
10	78	143	205	400	174	30	4931459	3.449
11	73	113	169	404	241	27	222484	3.627
12		82	43	506	369	36	5559	4.162

77. My teachers have criticized me for turning in a sloppy assignment.

(same options as above)

Boys

	1	2	3	4	5	X	N	M
5		337			663	305	6550	3.988
6	311	108	108	210	264		20530	3.008
7	54	212	111	366	256	54	74630	3.558
8	44	149	202	248	356	87	414500	3.723
9	57	96	145	324	378	28	2847890	3.870
10	39	69	117	347	428	20	4103488	4.056
11	29	52	95	341	483	20	159951	4.196
12		121	21	429	429	46	5669	4.165

Girls

	1	2	3	4	5	X	N	M
5			341	164	494		12950	4.153
6	518				482		4270	2.930
7	46	91	182	202	479	137	45810	3.978
8	79	68	124	231	498	35	254130	4.000
9	23	27	44	227	679	14	2621178	4.511
10	13	15	30	215	727	13	5014780	4.629
11	11	20	26	200	743	13	225641	4.645
12		37		124	839		5759	4.765

79. I have difficulty with the mechanics of English composition.

    1. Almost always
    2. Most of the time
    3. About half the time
    4. Not very often
    5. Almost never

Boys

	1	2	3	4	5	X	N	M
5				337	663	305	6550	4.663
6		181	230	354	236	121	18320	3.645
7	118	218	314	166	184	26	76630	3.080
8	176	203	279	202	140	76	418800	2.927
9	155	181	257	271	137	29	2844616	3.055
10	143	160	240	294	162	20	4102813	3.172
11	141	142	190	298	229	24	159316	3.332
12	96	43	170	372	320	22	5799	3.777

Girls

	1	2	3	4	5	X	N	M
5		341		494	164		12950	3.482
6		1000					4270	2.000
7	188	223	178	179	232	87	47920	3.044
8	85	248	255	284	129	67	246360	3.124
9	96	124	222	342	217	26	2591108	3.461
10	86	108	213	350	244	19	4981778	3.559
11	78	103	166	355	298	16	224908	3.692
12	72	75	106	328	419		5759	3.948

81. I get behind in my school assignments.

(same options as above)

Boys

	1	2	3	4	5	X	N	M
5	337	337			325	305	6550	2.638
6	114	239	239	342	65	112	18470	3.004
7	107	242	277	109	266	26	76630	3.186
8	120	168	265	262	184	64	423590	3.223
9	62	104	167	378	289	24	2859294	3.730
10	45	82	149	403	321	18	4111150	3.872
11	27	81	138	377	376	18	160398	3.992
12		94	152	433	321		5929	3.981

Girls

	1	2	3	4	5	X	N	M
5		171	171	494	164		12950	3.653
6		518		482			4270	2.965
7	86	46	264	190	414	87	47920	3.801
8	67	85	215	352	281	26	256260	3.695
9	30	51	96	374	449	16	2616734	4.162
10	22	36	83	407	453	14	5005885	4.234
11	17	34	82	407	460	13	225643	4.258
12	60		21	277	642		5759	4.443

82. My grades on written examinations or reports have been lowered because of careless errors in spelling, grammar, or punctuation.

    1. Almost always
    2. Most of the time
    3. About half the time
    4. Not very often
    5. Almost never

Boys

	1	2	3	4	5	X	N	M
5			337		663	305	6550	4.325
6	208	210	420	161			20530	2.535
7	152	113	213	223	300	57	74420	3.407
8	154	191	267	277	110	50	429160	2.999
9	91	152	244	328	185	25	2854403	3.363
10	74	130	221	357	217	20	4104124	3.514
11	73	114	181	388	244	17	160471	3.615
12	43	128	289	207	333	22	5799	3.658

Girls

	1	2	3	4	5	X	N	M
5		171		159	670		12950	4.329
6		518		482			4270	2.965
7	129	133	264	234	239	89	47810	3.322
8	109	155	187	306	244	34	254260	3.420
9	50	85	175	378	313	16	2615905	3.818
10	38	71	164	387	339	15	5001478	3.919
11	41	56	125	387	390	11	226150	4.030
12	36	103	79	329	454		5759	4.063

Items 106-113. The following questions ask you to report your grades in courses you have taken in the ninth grade or later. Please consider only semester grades. If you have not taken any courses in the topic, skip the item. In these questions choose the one answer that best describes your grades. Mark your answers as follows:

    1. All A's or equivalent
    2. Mostly A's or equivalent
    3. Mostly A's and B's or equivalent
    4. Mostly B's and C's or equivalent
    5. Mostly C's and D's or equivalent
    6. Mostly D's or below or equivalent

(If your school does not use letter grades, please use the following equivalents:

    For a grade of A: Excellent; 90-100
    For a grade of B: Good;   80-89
    For a grade of C: Average;   70-79
    For a grade of D: Fair;   60-69
    For a grade below D: Failing;   59 or lower)

Note--See page D-2 (Notes To Appendix D)

106. My grades in <u>mathematics</u> have been:

    1. All A's or equivalent
    2. Mostly A's or equivalent
    3. Mostly A's and B's or equivalent
    4. Mostly B's and C's or equivalent
    5. Mostly C's and D's or equivalent
    6. Mostly D's or below or equivalent

Boys

	1	2	3	4	5	6	X	N	M
5			500	500			934	4420	3.500
6	109	121	230	299	121	121	121	18320	3.563
7	136	118	350	197	100	98	241	63360	3.300
8	143	110	211	187	180	169	533	294070	3.657
9	96	114	232	288	194	75	46	2797120	3.595
10	91	121	250	313	184	40	25	4084075	3.499
11	158	133	230	298	160	21	25	159257	3.232
12	244	143	273	190	130	20		5929	2.879

Girls

	1	2	3	4	5	6	X	N	M
5	257		257	487			504	8610	2.973
6								0	
7	129	271	272	135	130	63	641	31740	3.053
8	64	170	323	152	174	118	1029	129640	3.555
9	105	100	238	299	191	66	49	2532531	3.569
10	93	112	257	324	180	35	28	4939336	3.491
11	111	145	273	290	154	27	32	221560	3.314
12	293	140	295	109	162		82	5325	2.708

107. My grades in <u>science courses</u> have been:

(same options as above)

Boys

	1	2	3	4	5	6	X	N	M
5					1000		2869	2210	5.000
6	115	175	121	477		112	121	18320	3.409
7	145	159	300	325	71		327	59260	3.016
8	126	91	348	177	181	76	679	268500	3.424
9	93	127	250	287	170	73	151	2542934	3.532
10	99	143	270	303	152	34	68	3917701	3.369
11	145	162	276	287	109	22	36	157508	3.120
12	160	239	425	82	93		39	5704	2.709

Girls

	1	2	3	4	5	6	X	N	M
5		204	204	387	204		197	10820	3.591
6								0	
7	71	225	212	356	136		745	29840	3.262
8	55	153	412	208	150	22	1327	113010	3.311
9	96	117	254	286	185	63	250	2126908	3.535
10	97	129	275	318	149	31	75	4723319	3.386
11	121	186	292	285	99	17	45	218644	3.103
12	228	203	156	303	110			5759	2.865

108. My grades in <u>foreign languages</u> have been:

    1. All A's or equivalent
    2. Mostly A's or equivalent
    3. Mostly A's and B's or equivalent
    4. Mostly B's and C's or equivalent
    5. Mostly C's and D's or equivalent
    6. Mostly D's or below or equivalent

Boys

	1	2	3	4	5	6	X	N	M
5			500		500		934	4420	4.000
6	400		338	135		126	258	16320	2.714
7	112	172	315	180	111	111	371	57360	3.336
8	115	194	196	183	184	128	987	226810	3.512
9	113	117	215	246	174	136	707	1714104	3.659
10	100	112	226	278	185	99	446	2893985	3.634
11	136	167	229	240	133	95	312	124389	3.352
12	268	151	188	132	188	73	89	5444	3.042

Girls

	1	2	3	4	5	6	X	N	M
5	333			333	333		953	6630	3.333
6								0	
7	100	97	510	94	199		1459	21180	3.195
8	73	202	306	174	143	101	1968	88600	3.418
9	167	121	238	245	150	79	1087	1273422	3.329
10	138	131	266	271	139	55	584	3204962	3.307
11	182	166	249	233	122	49	323	172779	3.093
12	244	232	262	178	54	30	460	3944	2.657

109. My grades in <u>history</u> and <u>social studies courses</u> have been:

(same options as above)

Boys

	1	2	3	4	5	6	X	N	M
5				500	500		934	4420	4.500
6	121	66	236	345	233		121	18320	3.504
7	148	74	266	253	188	72	377	57090	3.475
8	129	135	301	173	129	134	689	266810	3.440
9	91	133	252	280	171	73	260	2322203	3.525
10	101	139	269	304	153	34	103	3795494	3.372
11	152	181	262	257	115	34	33	157993	3.104
12	188	143	384	229	56			5929	2.822

Girls

	1	2	3	4	5	6	X	N	M
5	204	197	599				197	10820	2.395
6	1000						1073	2060	1.000
7		164	154	535	74	72	877	27740	3.736
8	42	130	321	305	140	62	1425	108450	3.556
9	112	133	272	279	153	52	371	1938598	3.384
10	119	141	284	299	131	26	118	4541420	3.259
11	140	165	315	253	106	21	47	218233	3.084
12	271	288	235	131	74		37	5553	2.440

110. My grades in <u>English</u> <u>courses</u> have been:

    1. All A's or equivalent
    2. Mostly A's or equivalent
    3. Mostly A's and B's or equivalent
    4. Mostly B's and C's or equivalent
    5. Mostly C's and D's or equivalent
    6. Mostly D's or below or equivalent

Boys

	1	2	3	4	5	6	X	N	M
5			500		500		934	4420	4.000
6	241	121	301	337			121	18320	2.734
7	72	364	185	175	135	69	286	61150	3.144
8	80	137	287	198	149	149	746	258210	3.646
9	72	123	248	291	190	76	66	2744365	3.630
10	68	134	277	324	163	33	41	4018924	3.481
11	98	177	281	303	122	18	33	157966	3.230
12	152	196	407	117	127			5929	2.871

Girls

	1	2	3	4	5	6	X	N	M
5		401	395	204			197	10820	2.803
6								0	
7	169	98	245	245	245		1032	25630	3.299
8	58	268	332	151	167	24	1540	103520	3.172
9	132	141	288	278	127	33	68	2488958	3.228
10	124	174	329	272	89	11	42	4872584	3.063
11	154	229	320	230	59	7	33	221272	2.832
12	316	214	281	117	72			5759	2.413

111. My grades in <u>vocational</u> <u>courses</u> have been

(same options as above)

Boys

	1	2	3	4	5	6	X	N	M
5	663				337		305	6550	2.350
6	228		181	471	121		121	18320	3.257
7	161	145	292	284	78	40	486	52930	3.092
8	155	129	237	207	122	149	1182	206550	3.461
9	111	155	280	259	135	60	644	1780545	3.333
10	111	166	296	296	104	27	621	2581413	3.198
11	146	237	261	262	79	15	678	97294	2.937
12	156	57	436	294	57		1810	2110	3.038

Girls

	1	2	3	4	5	6	X	N	M
5	333		333		333		953	6630	3.000
6								0	
7	89	190	363	87	187	84	1199	23680	3.345
8	56	310	165	152	198	118	2393	77510	3.480
9	122	154	278	266	130	52	1632	1009908	3.284
10	110	170	322	286	86	27	1390	2124742	3.148
11	123	228	307	263	62	17	1374	96270	2.965
12	53	354	199	53	247	94	1564	2246	3.370

112. My grades in <u>business</u> or <u>commercial</u> <u>courses</u> have been:

    1. All A's or equivalent
    2. Mostly A's or equivalent
    3. Mostly A's and B's or equivalent
    4. Mostly B's and C's or equivalent
    5. Mostly C's and D's or equivalent
    6. Mostly D's or below or equivalent

Boys

	1	2	3	4	5	6	X	N	M
5				500	500		934	4420	4.500
6		373	129	369		129	199	17120	3.384
7	221	192	215	240	45	86	611	48820	2.952
8	200	43	219	202	142	195	1212	203800	3.626
9	103	144	239	265	155	95	1015	1452525	3.509
10	92	126	269	323	145	45	959	2136438	3.439
11	128	145	244	297	151	35	878	86925	3.305
12	108		452	65	199	177	2188	1860	3.780

Girls

	1	2	3	4	5	6	X	N	M
5			667		333		953	6630	3.667
6								0	
7	199		202	209	192	199	1459	21180	3.790
8	209	129	252	155	90	164	2698	71110	3.280
9	125	143	254	274	143	61	1694	986478	3.349
10	107	145	294	312	118	26	813	2800821	3.266
11	149	222	284	258	70	17	549	147559	2.927
12	271	174	305	127	60	63	720	3348	2.719

113. My grades in <u>all</u> <u>courses</u> <u>starting</u> <u>with</u> <u>the</u> <u>ninth</u> <u>grade</u> have been:

(same options as above)

Boys

	1	2	3	4	5	6	X	N	M
5			1000				934	4420	3.000
6	399		74	252		274	274	16110	3.277
7	221	284	191	177	84	43	614	48710	2.749
8	206	172	150	175	154	142	1154	209260	3.325
9	73	131	262	324	172	37	119	2616406	3.502
10	54	121	296	376	138	16	63	3935819	3.470
11	69	171	312	341	94	12	58	154320	3.256
12	91	153	432	178	125	22		5929	3.158

Girls

	1	2	3	4	5	6	X	N	M
5	204		591		204		197	10820	3.000
6								0	
7	239	97	251	82	86	245	1020	25780	3.412
8	181	150	216	83	215	155	2694	71200	3.465
9	75	129	298	336	140	22	125	2362483	3.403
10	55	127	336	368	107	8	59	4794591	3.368
11	48	181	363	328	74	5	65	214659	3.214
12	43	366	415	82	95		21	5639	2.819

137. Were your parents born in the United States?

    1. My father was born in the U.S. but my mother was not.
    2. My mother was born in the U.S. but my father was not.
    3. Both my parents were born in the U.S.
    4. Both my parents were born outside the U.S.
    5. I don't know whether my father or mother was born in the U.S.

Boys

	1	2	3	4	5	X	N
5		258	508		234		8550
6	228	241	295		236	121	18320
7	27	139	632	81	121	26	76630
8	31	106	663	124	77	65	423350
9	36	57	821	59	27	46	2798679
10	31	49	857	51	13	30	4061748
11	35	88	787	77	13	30	158499
12	74	59	702	165		21	5809

Girls

	1	2	3	4	5	X	N
5		409	190	197	204	197	10820
6		482			518		4270
7			710	211	79		52080
8	50	67	638	147	98	75	244650
9	24	38	869	47	22	37	2563545
10	24	42	884	40	9	28	4939957
11	30	75	821	66	8	20	224100
12	23	67	787	100	23	37	5553

171. If your family is renting your home or the place where you live, about how much are they paying each month?

    1. Less than $60   4. $100 to $119
    2. $60 to $79   5. $120 or more
    3. $80 to $99   6. We have bought (or are buying) our home.

Boys

	1	2	3	4	5	6	X	N
5	258		234	258		249		8550
6	148	283		138	282	148	377	14910
7	166	95	167	78	53	441	26	76630
8	203	101	148	97	34	417	207	373520
9	131	87	64	40	34	644	84	2700678
10	95	68	52	29	25	731	63	3937898
11	105	89	64	40	52	650	75	151853
12	57	168	83	64	21	605	61	5589

Girls

	1	2	3	4	5	6	X	N
5	247					753	504	8610
6	482					518		4270
7	318	9	93	54	48	478	132	46020
8	224	86	46	68	54	521	74	244790
9	151	83	46	22	19	678	79	2462293
10	103	69	40	22	20	746	68	4755893
11	123	83	57	30	44	664	67	214255
12	170	71	107	47	47	557	136	5068

172. If your family has bought (or is buying) your home, what is the present value?

1. Under $6,000
2. $6,000 to $10,000
3. $10,000 to $15,000
4. $15,000 to $22,000
5. More than $22,000
6. We are renting our home

Boys

	1	2	3	4	5	6	X	N
5			325			675	305	6550
6	290	148	148	138	134	142	377	14910
7	172	86	171	150	193	228	57	74420
8	137	138	182	193	77	274	183	381090
9	98	174	201	167	129	231	133	2582431
10	72	174	205	188	162	199	104	3789351
11	64	136	163·	191	150	297	126	144913
12		211		205	217	367	44	5679

Girls

	1	2	3	4	5	6	X	N
5	341	318				341	998	6480
6			518			482		4270
7	373	100		50	102	375	239	42020
8	158	162	123	102	67	387	170	224710
9	104	166	172	152	121	285	201	2213769
10	75	164	193	185	154	229	172	4331452
11	79	135	155	182	147	302	191	191945
12	294	138	136	144	75	213	164	4948

173. Please make the best estimate you can of your family's total income for last year (1959). Include money earned by both parents or anyone else in the household who worked.

1. Less than $3,000
2. $3,000 to $5,999
3. $6,000 to $8,999
4. $9,000 to $11,999
5. $12,000 or more
6. I can't estimate this.

Boys

	1	2	3	4	5	6	X	N
5	258	249	258		234			8550
6	137	128		405	131	199	274	16110
7	136	55	152	164	91	401	26	76630
8	142	135	121	123	106	373	149	392410
9	74	197	190	102	85	352	72	2730726
10	44	199	218	110	107	322	47	3996512
11	61	192	185	106	141	315	83	150649
12		224	315	97	118	246	44	5679

Girls

	1	2	3	4	5	6	X	N
5	257					743	504	8610
6						1000		4270
7	332	53	103	96	103	314	244	41860
8	151	61	113	68	44	563	94	240340
9	62	134	115	56	51	581	65	2495836
10	40	145	134	66	63	552	43	4867130
11	52	144	161	75	72	497	75	212586
12	37	208	57	85	100	513		5759

Note--See page D-2 (Notes To Appendix D)

174. Which of the following best describes your family's finances?

1. Barely able to make a living   4. Well-to-do
2. Have the necessities   5. Wealthy
3. Comfortable   6. Extremely wealthy

Boys

	1	2	3	4	5	6	X	N	M
5	508			234	258			8550	2.736
6	128	205	274	255		137	274	16110	3.205
7	179	58	536	169	57		116	70450	2.866
8	87	179	409	167	83	75	137	396440	3.207
9	41	147	565	181	43	23	54	2776183	3.107
10	22	129	639	170	27	12	31	4057751	3.086
11	10	114	654	178	29	16	34	157837	3.150
12		125	643	198	34			5929	3.141

Girls

	1	2	3	4	5	6	X	N	M
5		239	247	257	257		504	8610	3.531
6	518	482						4270	1.482
7	125	230	187	121	172	166	42	49970	3.485
8	81	247	373	143	79	76	99	239360	3.122
9	40	159	603	152	30	17	41	2552337	3.025
10	19	137	674	139	23	8	22	4966946	3.033
11	21	128	688	138	17	8	28	222348	3.027
12	93	94	712	100				5759	2.819

Items 190-193. How many of the following articles are in your home?

191. Telephone, television set, radio, phonograph

1. None   3. Two   5. Four
2. One   4. Three

Boys

	1	2	3	4	5	X	N	M
5		344	344		312	332	6420	3.279
6	131	137		252	480	274	16110	3.813
7	170	227	146	224	234	98	71630	3.124
8	68	252	193	207	279	142	394830	3.377
9	32	97	109	178	583	46	2798471	4.183
10	15	49	62	160	715	27	4076539	4.511
11	9	36	69	150	736	13	161173	4.569
12	22	22		170	786		5929	4.677

Girls

	1	2	3	4	5	X	N	M
5		492	508			2091	4190	2.508
6		482	518				4270	2.518
7	39	298	332	163	169	8	51680	3.125
8	42	197	193	236	333	52	249890	3.622
9	17	71	96	189	628	26	2589178	4.341
10	8	33	58	152	750	15	5002397	4.602
11	4	39	81	141	736	18	224559	4.566
12		113		303	584		5759	4.357

Note--See page D-2 (Notes To Appendix D)

193. Musical instruments, hi-fi or stereophonic set, classical records, art equipment, photo developing equipment

   1. None   4. Three
   2. One   5. Four
   3. Two   6. Five

Boys

	1	2	3	4	5	6	X	N	M
5	344		344		312		332	6420	2.935
6	186		629	186			725	11900	2.814
7	238	201	381	121	59		131	69510	2.563
8	266	284	216	110	68	57	142	394770	2.602
9	235	238	232	157	82	55	53	2779238	2.778
10	197	238	243	180	89	52	30	4064842	2.883
11	175	217	244	193	110	61	26	159046	3.026
12	142	248	186	251	132	42		5929	3.110

Girls

	1	2	3	4	5	6	X	N	M
5	492	508					2091	4190	1.508
6	518	482						4270	1.482
7	280	479		103	49	89	144	45520	2.429
8	321	274	155	135	57	57	78	243860	2.505
9	235	259	229	164	71	42	33	2574026	2.700
10	198	243	249	183	87	40	19	4985119	2.839
11	185	231	250	187	106	41	16	225082	2.921
12	58	244	218	252	106	122		5759	3.469

206. Which one of the following comes closest to describing the work of your father (or the male head of your household)? Mark only one answer. If he works on more than one job, mark the one on which he spends most of his time. If he is now out of work, or if he's retired, mark the one that he did last.

    1. I don't know

    2. Farm or ranch owner and/or manager

    3. Farm or ranch foreman

    4. Farm or ranch worker

    5. Workman or laborer--such as factory or mine worker, fisherman, filling station attendant, longshoreman, etc.

    6. Private household worker--such as a servant, butler, etc.

    7. Protective worker--such as a policeman, detective, sheriff, fireman

    8. Service worker--such as a barber, beautician, waiter, etc.

    9. Semi-skilled worker--such as factory machine operator, bus or cab driver, meat cutter, etc.

  10. Skilled worker or foreman--such as a baker, carpenter, electrician, enlisted man in the armed forces, mechanic, plumber, plasterer, tailor, foreman in a factory or mine (but not on a farm), etc.

  11. Clerical worker--such as bank teller, bookkeeper, sales clerk, office clerk, mail carrier, messenger, etc.

  12. Salesman--such as real estate or insurance salesman, factory representative, etc.

  13. Manager--such as sales manager, store manager, office manager, business manager, factory supervisor, etc.

  14. Official--such as manufacturer, officer in a large company, banker, government official or inspector, etc.

  15. Proprietor or owner--such as owner of a small business, wholesaler, retailer, contractor, restaurant owner, etc.

  16. Professional--such as actor, accountant, artist, clergyman, dentist, engineer, lawyer, librarian, scientist, etc.

  17. Technical--such as draftsman, surveyor, medical or dental technician, etc.

Boys

	1	2	3	4	5	6	7	8	9	10	11
5			344			656					
6	174		162	166				166			
7	232	100	53	183	135	33		35	63		33
8	244	87	22	76	189	12	30	10	74	101	22
9	121	88	13	26	184	6	19	16	67	176	27
10	81	85	7	16	164	2	19	12	70	186	30
11	82	74	3	10	149	3	13	16	66	183	32
12	105	22			71		36	22		255	59

Girls

	1	2	3	4	5	6	7	8	9	10	11
5	1000										
6	1000										
7	312	376			265				46		
8	255	57	52	76	216		19	21	37	111	
9	172	87	9	29	201	3	14	14	55	171	20
10	119	78	6	19	172	2	16	11	62	184	27
11	96	52	8	15	158	1	18	9	66	203	30
12	179				126		23		23	109	130

Boys

	12	13	14	15	16	17	X	N	M
5							332	6420	4.967
6					331		617	12700	7.958
7		29		33	70		244	63190	5.405
8	11	26	27	46	11	11	213	371650	5.927
9	43	61	23	51	52	27	95	2671537	6.003
10	51	75	27	72	67	36	55	3968887	8.953
11	37	64	36	83	101	48	54	154911	9.487
12	41	41	21	143	183		21	5809	10.523

Girls

	12	13	14	15	16	17	X	N	M
5							2091	4190	1.000
6							1073	2060	1.000
7							94	47620	2.809
8	8		23	42	27	55	201	219000	6.073
9	35	58	16	54	43	20	73	2477512	7.372
10	45	71	21	75	61	30	57	4805546	8.520
11	40	61	24	100	82	37	59	215889	9.284
12	87	45		109	171		82	5325	9.682

208. Which one of the following comes closest to describing the work of your mother (or the female head of your household)? Mark only one answer. If she does housework in addition to outside work, count only the outside work. If she works on more than one job, mark the most important one. If she usually works, but is now out of work, mark the one that she did last.

    1. I don't know

    2. Housewife only; she has not worked for pay in the last three years

    3. Farm or ranch owner and/or manager

    4. Farm or ranch worker

    5. Worker or laborer--such as charwoman, laundry worker, etc.

    6. Private household worker--such as housekeeper, maid, laundress, etc.

    7. Protective worker--such as policewoman, etc.

    8. Service worker--such as beautician, waitress, etc.

    9. Semi-skilled worker--such as factory machine operator, cab driver, etc.

  10. Skilled worker or forewoman--such as baker, inspector, etc.

  11. Clerical worker--such as bookkeeper, secretary, typist, sales clerk, store clerk, etc.

  12. Sales--such as real estate, life insurance, etc.

  13. Manager--such as sales manager, store manager, office manager, business manager, factory supervisor, etc.

  14. Official--such as manufacturer, officer in a large company, banker, government official or inspector, etc.

  15. Proprietor or owner--such as owner of a small business, wholesaler, retailer, restaurant owner, etc.

  16. Professional--such as actress, accountant, artist, dentist, physician, engineer, lawyer, librarian, scientist, etc.

  17. Technical--such as draftsman, medical or dental technician, etc.

Note--See page D-2 (Notes To Appendix D)

	1	2	3	4	5	6	7	8	9	10	11
5		500									
6	303	159	148			152			152		86
7	75	455		71	36	38	36	35			69
8	130	435	24		69	66	24	46	27	29	7
9	86	532	10	11	44	32	8	43	39	16	79
10	60	552	4	5	37	27	4	41	45	16	106
11	61	530	8	2	32	15	2	37	45	11	124
12	59	317			41			69	39		257

Girls

	1	2	3	4	5	6	7	8	9	10	11
5	492					508					
6		1000									
7	133	695	43	42	42						
8	142	558	9	10	44	67		29	21	8	19
9	91	533	5	6	39	38	2	48	50	11	87
10	66	535	3	3	32	29	2	45	55	13	111
11	58	462	4	5	34	47	2	33	65	10	131
12		558			38	136					210

Boys

	12	13	14	15	16	17	X	N
5						500	934	4420
6							477	13900
7			36		113	36	359	57850
8	17	41		11	62	12	256	358830
9	11	18	9	11	47	6	104	2650155
10	12	15	8	13	52	4	56	3963342
11	11	20	17	13	70	2	36	157600
12		21		21	176		22	5799

Girls

	12	13	14	15	16	17	X	N
5							2091	4190
6								4270
7					44		96	47520
8	10	9	23		30	19	196	219930
9	10	13	9	13	40	5	70	2482932
10	10	15	6	15	56	4	39	4889245
11	11	27	10	17	83	3	43	219229
12					58		23	5629

Note--See page D-2 (Notes To Appendix D)

210. In which <u>one</u> of the following programs do you expect to specialize in college? Mark one of these even if you have not definitely made up your mind.

1. I do not expect to attend college.
2. Biological sciences (botany, physiology, zoology)
3. Physical sciences (chemistry, geology, physics, astronomy)
4. Engineering
5. Mathematics
6. Pre-medical
7. Pre-dental
8. Pre-law
9. Business administration
10. Education
11. Sociology or psychology
12. Political science or economics
13. Foreign languages
14. Other liberal arts (philosophy, literature, history, etc.)
15. Fine arts (music, art, ballet, etc)
16. Agriculture
17. Nursing
18. Home economics
19. Pre-theology
20. Journalism
21. A program not listed above
22. I have no plans regarding college programs.

Boys

	1	2	3	4	5	6	7	8	9	10	11	12	13
5	500					500							
6	318				148			152		86			
7	432	79	84	36									
8	335	29	97	77	38	24	31	1	54	33	6		24
9	272	28	60	186	44	32	14	32	27	22	5	6	7
10	216	39	64	201	45	41	16	35	38	24	5	4	5
11	202	38	105	168	60	58	9	44	53	29	11	6	6
12	72	20	97	194	113	120	42	140	76	37	20		

Girls

	1	2	3	4	5	6	7	8	9	10	11	12	13
5	508												
6	1000												
7	426	132		47	47					42			
8	413	21	20	21	31			40	62	9	9		29
9	314	14	16	3	19	25	4	11	85	72	15	3	15
10	291	19	13	3	24	25	4	8	93	101	26	2	18
11	233	36	20	3	31	37	2	15	83	141	39	2	37
12	230	21	21		21	38		37		259	82	21	23

Boys

	14	15	16	17	18	19	20	21	22	X	N
5										934	4420
6	152		144							477	13900
7	83	82			41			80	81	534	51260
8		37	33	6	6	6		75	87	318	341860
9	5	16	35	6	3	5	4	82	110	127	2595668
10	10	18	36	3	1	5	6	84	103	58	3955115
11	16	19	10	2		7	7	61	89	43	156455
12									67		5929

Girls

	14	15	16	17	18	19	20	21	22	X	N
5				492						2091	4190
6											4270
7				43				42	222	96	47520
8		21		29	24			89	182	205	218170
9	9	36	2	116	27	1	10	86	114	74	2474455
10	15	39	2	105	24	2	10	77	100	37	4897784
11	36	33	1	68	18	1	15	64	85	29	222076
12	21	44		21	101			58		23	5629

Note--See page D-2 (Notes To Appendix D)

211. In the following list of occupations, mark the one occupation you <u>expect</u> to make your career after you have completed your education. <u>If your choice is not on the list, mark the one that is closest to it.</u> <u>Mark one of these even if you have not definitely made up your mind.</u>

1. Accountant
2. Biological scientist (biologist, botanist, physiologist, zoologist, etc.
3. College professor
4. Dentist
5. Engineer (aeronautical, civil, chemical, mechanical, etc.)
6. Elementary school teacher
7. High school teacher
8. Lawyer
9. Mathematician
10. Pharmacist
11. Clergyman (minister, priest, rabbi, etc.)
12. Physical scientist (chemist, geologist, physicist, astronomer, etc.)
13. Physician
14. Political scientist or economist
15. Social worker
16. Sociologist or psychologist
17. Armed forces officer
18. Artist or entertainer
19. Businessman
20. Craftsman
21. Engineering or scientific aide
22. Forester
23. Medical or dental technician
24. Nurse
25. Pilot, airplane
26. Policeman or fireman
27. Secretary, office clerk or typist
28. Writer
29. Barber or beautician
30. Enlisted man in the armed forces
31. Farmer
32. Housewife
33. Salesman or saleswoman
34. Skilled worker (electrician, machinist, plumber, printer, etc.)
35. Structural worker (bricklayer, carpenter, painter, paperhanger, etc.)
36. Some other occupation different from any above

Note--See page D-2 (Notes To Appendix D)

Boys

	1	2	3	4	5	6	7	8	9	10	11	12	13
5													
6						213	124			218			
7	46	44			137	44			47	44		98	95
8	41	33	31	46	132	41	40	31	42	13	35	34	13
9	23	23	8	25	191	9	26	36	18	14	13	36	24
10	27	31	5	23	204	6	37	38	17	15	16	41	33
11	53	29	14	12	180	5	42	48	30	21	18	74	41
12	44	22	22	22	134		78	154	41			145	132

Girls

	1	2	3	4	5	6	7	8	9	10	11	12	13
5													
6							518						
7			52			127	54	56	56				
8	10	12	20	10	10	100	32	23					10
9	15	12	4	3	4	68	51	13	8	7	3	9	13
10	16	15	4	3	3	84	63	8	8	6	4	9	13
11	23	14	3	7	2	128	75	13	12	7	2	17	20
12		21	76			139	171	37	21			21	38

Boys

	14	15	16	17	18	19	20	21	22	23	24	25	26
5				344							344		
6													
7				123			44			47			
8		26		63	21	33		13	21			78	6
9	3	8	3	65	21	31	13	14	30	6	2	47	20
10	2	5	3	56	18	37	12	12	30	5	1	35	17
11	5	10	7	42	19	29	17	13	13	7	1	23	11
12			22			61						41	

Girls

	14	15	16	17	18	19	20	21	22	23	24	25	26
5											1000		
6													
7				52							106		
8				29	21					11	103	10	24
9	1	21	8	13	28	4		1	1	12	139	6	2
10	1	25	14	10	30	5		1	1	13	122	6	2
11	4	23	24	8	40	3		1	2	25	89	6	1
12		37	44		21						21		21

Boys

	27	28	29	30	31	32	33	34	35	36	X	N
5										312	332	6420
6							218			228	1119	9690
7			47	47	44			47		47	742	45150
8				18	69	7	13	15	7	81	391	323930
9	6	3	7	19	61	2	6	35	15	136	149	2546383
10	3	5	7	20	57	1	7	41	9	123	68	3918861
11	10	7	8	13	47		2	31	8	111	45	156229
12				42						39	98	5399

Girls

	27	28	29	30	31	32	33	34	35	36	X	N
5											2091	4190
6	482											4270
7	171		51	56		161				56	327	39260
8	146	37	35	22	31	203				100	277	205880
9	242	9	45	2	5	137	4	1	1	106	78	2466576
10	265	10	42	2	3	113	3	1		98	38	4890426
11	249	6	31	1		69	2	1	1	94	33	221354
12	114		21			137				58	23	5629

Note--See page D-2 (Notes To Appendix D)

212. Which one of the following occupations would you most like to enter? If your choice is not on the list, mark the one that is closest to it. Mark one of these even if you have not definitely made up your mind.

   1. Accountant
   2. Biological scientist (biologist, botanist, physiologist, zoologist, etc.)
   3. College professor
   4. Dentist
   5. Engineer (aeronautical, civil, chemical, mechanical, etc.)
   6. Elementary school teacher
   7. High school teacher
   8. Lawyer
   9. Mathematician
  10. Pharmacist
  11. Clergyman (minister, priest, rabbi, etc.)
  12. Physical scientist (chemist, geologist, physicist, astronomer, etc.)
  13. Physician
  14. Political scientist or economist
  15. Social worker
  16. Sociologist or psychologist
  17. Armed forces officer
  18. Artist or entertainer
  19. Businessman
  20. Craftsman
  21. Engineering or scientific aide
  22. Forester
  23. Medical or dental technician
  24. Nurse
  25. Pilot, airplane
  26. Policeman or fireman
  27. Secretary, office clerk or typist
  28. Writer
  29. Barber or beautician
  30. Enlisted man in the armed forces
  31. Farmer
  32. Housewife
  33. Salesman or saleswoman
  34. Skilled worker (electrician, machinist, plumber, printer, etc.)
  35. Structural worker (bricklayer, carpenter, painter, paperhanger, etc.)
  36. Some other occupation different from any above

Boys

	1	2	3	4	5	6	7	8	9	10	11	12	13
5													
6		186					101	173				355	
7		87	42		39	42		47	91	42		47	92
8	50	67	20	75	97	38	1	39	22	12	20	54	7
9	20	27	7	26	183	9	26	39	21	12	15	41	26
10	25	34	5	23	196	7	33	42	17	14	16	44	35
11	43	41	10	12	179	5	42	53	23	14	19	75	49
12	43	22	22	24	245		36	151				142	129

Girls

	1	2	3	4	5	6	7	8	9	10	11	12	13
5													
6						518							
7		145		60					64	125			
8	10		39	19	10	41	39	30	2		10		
9	13	14	5	4	4	70	49	20	9	8	4	12	16
10	14	20	4	4	4	79	54	17	10	7	5	13	18
11	18	23	4	7	2	115	59	29	13	8	3	18	31
12		21	76			118	127	37	21			21	38

Boys

	14	15	16	17	18	19	20	21	22	23	24	25	26
5				344	344								
6													
7	44			118						45		39	
8	13	33		51	15	20		13	22	12	7	38	13
9	2	7	4	67	23	29	15	15	36	6	4	64	19
10	2	4	4	57	23	31	11	12	38	6	2	52	18
11	4	12	9	44	22	31	14	12	19	4	1	39	17
12		22				24	41					40	

Girls

	14	15	16	17	18	19	20	21	22	23	24	25	26
5											1000		
6													
7		58		60							60		
8				19	51	25				11	161	9	23
9	2	23	10	18	41	4		1	1	12	149	10	3
10	2	32	19	14	47	5		1	1	15	127	9	3
11	2	25	35	8	58	7		1	4	21	90	8	2
12		59	89		43						58		21

	27	28	29	30	31	32	33	34	35	36	X	N
5				312							332	6420
6										186	725	11900
7				45	89			45		45	668	47140
8			25	25	54		6	21	7	121	406	320530
9	4	4	7	15	56	3	6	32	14	116	147	2552088
10	3	7	7	15	54	1	7	39	10	106	68	3919640
11	7	5	7	13	38		5	37	7	89	50	155437
12										61	72	5529

	27	28	29	30	31	32	33	34	35	36	X	N
5											2091	4190
6	482											4270
7	125		58			183				64	508	34540
8	164		39	29	10	100	21	10		129	224	.214790
9	218	13	51	2	6	108	5	2	1	94	78	2466463
10	221	16	49	2	5	88	3			92	38	4890887
11	201	14	32		1	68	2	1	1	90	37	220408
12	77		21		37	101				36	23	5629

218. Mark the <u>one</u> answer indicating the <u>highest</u> level of education your father reached. <u>Mark the one best answer even if you are not sure.</u>

   1. I don't know
   2. None, or some grade school
   3. Completed grade school
   4. Some high school, but did not graduate
   5. Graduated from high school
   6. Vocational or business school after high school
   7. Some junior or regular college, but did not graduate
   8. Graduated from a regular 4-year college
   9. Master's degree
  10. Some work toward doctorate or professional degree
  11. Completed doctorate or professional degree

Boys

	1	2	3	4	5	6	7	8	9	10	11
5	525			475							
6		311		159			148	144	152		86
7	152	295	36	108	102	137	136			34	
8	263	116	101	166	128	87	12	38	44	20	25
9	161	69	131	191	226	42	51	71	22	7	28
10	107	47	125	189	255	53	64	87	21	13	38
11	113	48	111	196	223	47	62	92	37	14	56
12	21		40	360	255	65	21	100	37		102

Girls

	1	2	3	4	5	6	7	8	9	10	11
5		492		508							
6		1000									
7	261	179	270	86	158		47				
8	351	195	69	230	2	19	30	21		25	58
9	196	84	138	206	198	36	39	52	12	6	33
10	135	60	126	202	235	49	58	70	17	10	39
11	131	72	106	210	209	43	64	78	18	15	55
12	79	195	126	133	129		88	92		132	25

Boys

	X	N	M
5	1031	4210	2.425
6	477	13900	5.762
7	283	61280	3.910
8	335	337590	3.883
9	112	2631921	4.343
10	64	3934081	4.807
11	46	156000	4.990
12	35	5729	5.640

Girls

	X	N	M
5	2091	4190	3.017
6	1073	2060	3.000
7	99	47410	2.887
8	233	213330	3.258
9	86	2447664	4.023
10	56	4810615	4.552
11	49	217840	4.718
12	103	5221	4.977

Note--See page D-2 (Notes To Appendix D)

219. Mark the one answer indicating the highest level of education your mother reached. Mark the one best answer even if you are not sure.

.1. I don't know
2. None, or some grade school
3. Completed grade school
4. Some high school, but did not graduate
5. Graduated from high school
6. Vocational or business school after high school
7. Some junior or regular college, but did not graduate
8. Graduated from a regular 4-year college
9. Master's degree
10. Some work toward doctorate or professional degree
11. Completed doctorate or professional degree

Boys

	1	2	3	4	5	6	7	8	9	10	11
5	1000										
6	157	340					162		174	166	
7	239	112	225	111	58	75	73	35	72		
8	246	123	82	182	151	53	53	46	6	26	31
9	141	44	104	187	320	47	45	75	14	9	13
10	90	25	92	173	375	62	56	89	16	8	14
11	83	29	81	171	359	66	63	83	29	11	25
12		34		42	370	149	212	135	20		37

Girls

	1	2	3	4	5	6	7	8	9	10	11
5		492		508							
6					1000						
7	222	413	130	42	105	42			47		
8	292	213	134	192	85	10	11	12		2	49
9	132	56	123	238	277	55	40	46	9	5	19
10	82	34	105	224	323	79	55	64	11	7	16
11	76	36	114	212	294	76	62	72	26	10	22
12		75	60	120	381	64	162	58	43		36

Boys

	X	N	M
5	1031	4210	1.000
6	617	12700	5.201
7	377	57090	3.762
8	348	334300	3.938
9	112	2631113	4.453
10	58	3955772	4.834
11	43	156495	5.007
12		5929	6.139

Girls

	X	N	M
5	2091	4190	3.017
6	1073	2060	5.000
7	96	47520	2.802
8	244	211360	3.100
9	68	2487667	4.270
10	40	4883257	4.688
11	36	220612	4.853
12		5759	5.485

Note--See page D-2 (Notes To Appendix D)

220. With whom are you now living; that is, who are the heads of the house?

1. Mother and father
2. Mother only
3. Father only
4. Sometimes with my mother, sometimes with my father
5. Mother and stepfather
6. Father and stepmother
7. Grandparents, aunt, uncle, or cousins
8. Brother or sister
9. Foster parents (not relatives)
10. Someone not listed above

Boys

	1	2	3	4	5	6	7	8	9	10
5	525								475	
6	311	86			307	152	144			
7	319	165	64	98	157	164		33		
8	534	117	54	38	67	34	48	48	17	41
9	751	85	28	14	44	17	27	12	8	15
10	831	72	17	7	32	10	15	5	3	7
11	823	92	19	6	26	15	13	3		3
12	819	41	22		118					

Girls

	1	2	3	4	5	6	7	8	9	10
5	1000									
6		518		482						
7	592	189		43			176			
8	645	143	53	22	41	33	27		9	29
9	776	99	16	7	49	11	22	7	5	10
10	819	84	14	3	43	10	15	4	3	5
11	828	83	9	1	39	9	15	5	4	7
12	920	58			23					

Boys

	X	N
5	1031	4210
6	477	13900
7	241	63380
8	252	360010
9	93	2677165
10	45	4005629
11	27	158967
12	21	5809

Girls

	X	N
5	2091	4190
6		4270
7	96	47520
8	138	231040
9	51	2527865
10	26	4949636
11	20	224213
12		5759

221. What is the total number of living children in your family? Include your-
self, together with all full brothers and sisters, half-brothers and sisters,
stepbrothers and sisters, and foster brothers and sisters. Include those not
now living in your home.

1. One	7. Seven
2. Two	8. Eight
3. Three	9. Nine
4. Four	10. Ten
5. Five	11. Eleven
6. Six	12. Twelve or more

Boys

	1	2	3	4	5	6	7	8	9	10	11	12
5									525	475		
6			350					217		227		206
7	67		123	211	70	135	121	137	68	33	36	
8	46	120	114	186	108	161	54	70	52	17	6	66
9	85	193	195	170	121	79	56	36	23	14	10	19
10	97	246	228	164	103	63	37	23	14	9	6	11
11	130	292	229	133	90	48	32	10	8	9	5	14
12	259	321	206	114			23	39				37

Girls

	1	2	3	4	5	6	7	8	9	10	11	12
5			508					492				
6		518						482				
7		46	100	49	137	143	137	46	248			95
8	62	110	174	167	101	68	112	111	28	38	9	19
9	73	193	208	167	115	79	55	38	26	18	12	17
10	88	230	229	171	107	66	42	24	16	11	7	10
11	106	299	204	134	92	59	31	27	12	22	10	5
12	83	179	427	63	58	35	58	75		23		

Boys	X	N	M
5	1031	4210	9.475
6	1110	9730	7.524
7	281	61380	5.714
8	263	356770	5.314
9	103	2652497	4.170
10	49	3989443	3.675
11	33	157982	3.360
12	35	5729	2.898

Girls	X	N	M
5	2091	4190	5.458
6		4270	4.895
7	146	45450	6.822
8	208	217760	5.027
9	58	2512792	4.236
10	29	4933983	3.778
11	27	222477	3.597
12		5759	3.705

224. Where did you live just before moving to this community?

1. I have lived here all my life.
2. New England States (Me., N.H., Vt., Mass., R.I., Conn.)
3. Middle Atlantic States (N.Y., N.J., Pa.)
4. South Atlantic States (Del., Md., D.C., Va., W.Va., N.C., S.C., Ga., Fla.)
5. East North Central States (Ohio, Ind., Ill., Mich., Wis.)
6. West North Central States (Minn., Iowa, Mo., N.Dak., S.Dak., Neb., Kan.)
7. East South Central States (Ky., Tenn., Ala., Miss.)
8. West South Central States (Ark., La., Okla., Texas)
9. Mountain States (Mont., Idaho, Wyo., Colo., N.Mex., Ariz., Utah, Nev.)
10. Pacific States (Wash., Ore., Calif., Hawaii, Alaska)
11. United States possessions (Puerto Rico, Guam, etc.)
12. In a foreign country

Boys

	1	2	3	4	5	6	7	8	9	10	11	12
5	525					475						
6	159	159		86		152	292	152				
7	415	68	34	70		37	73	73	90	36		104
8	408	28	137	72	113	58	67	18	17	40	5	35
9	532	30	50	68	86	46	35	51	29	45	7	21
10	563	33	71	56	79	46	27	38	21	48	4	15
11	610	31	120	32	58	18	35	25	12	35	7	16
12	517		172			105	36		56	56		58

Girls

	1	2	3	4	5	6	7	8	9	10	11	12
5	1000											
6	518			482								
7	565	121	48	50	102				53			60
8	560		35	63	124		55	31		10	44	77
9	596	23	41	65	73	35	34	46	26	40	5	16
10	596	33	63	52	78	42	25	35	19	43	3	11
11	630	40	116	37	59	15	33	18	6	18	3	24
12	804		42	21	37		37		23			37

Boys

	X	N
5	1031	4210
6	477	13900
7	321	59520
8	289	349730
9	123	2606931
10	62	3941640
11	41	156863
12		5929

Girls

	X	N
5	5286	2060
6		4270
7	259	41350
8	297	202800
9	79	2463713
10	40	4882618
11	40	219771
12		5759

225. How many rooms are in your home? Count all rooms; bedrooms, bathrooms, kitchen, living room, dining room, recreation room, enclosed porch, etc.

1. One	7. Seven or eight
2. Two	8. Nine or ten
3. Three	9. Eleven or twelve
4. Four	10. Thirteen or fourteen
5. Five	11. Fifteen or sixteen
6. Six	12. Seventeen or more

Boys

	1	2	3	4	5	6	7	8	9	10	11	12
5	475		525									
6	159		152	86		148	144				159	152
7	104	105	34	125	72	113	196	36	109	36		72
8	43	21	51	120	157	213	192	98	27	18	6	55
9	8	11	21	46	98	163	298	179	87	42	22	26
10	3	4	12	33	78	144	322	209	105	46	21	23
11	1	2	18	57	111	183	308	180	68	38	17	17
12			22	131	148	62	263	147	88	39		100

Girls

	1	2	3	4	5	6	7	8	9	10	11	12
5							1000					
6			1000									
7			141	305	195	99	97			162		
8		25	98	122	171	166	249	60	57	33		18
9	2	5	13	45	107	175	325	189	80	34	12	14
10	1	2	7	31	82	156	345	211	94	38	17	14
11	1	1	12	54	113	166	331	176	97	26	14	10
12				114	21	78	412	174	135		21	45

Boys	X	N	M
5	1031	4210	2.050
6	477	13900	6.427
7	323	59420	5.806
8	336	337430	6.055
9	125	2602176	7.014
10	66	3924976	7.273
11	46	156070	6.917
12	82	5479	7.099

Girls	X	N	M
5	5286	2060	7.000
6		4270	3.000
7	205	43210	5.516
8	207	217870	5.967
9	69	2485436	6.957
10	39	4885885	7.195
11	46	218636	6.949
12		5759	7.289

226. How many people live in your home? Include yourself, brothers, sisters, parents, relatives, boarders, roomers, servants, etc.

1. Two
2. Three
3. Four
4. Five
5. Six
6. Seven

7. Eight
8. Nine
9. Ten
10. Eleven
11. Twelve
12. Thirteen or more

Boys

	1	2	3	4	5	6	7	8	9	10	11	12
5		475					525					
6		86		159	148	311	296					
7	70	33	103	168	297	34	72	189				33
8	18	117	194	123	148	180	55	63	31	17	17	36
9	24	138	235	210	149	94	59	36	22	12	6	13
10	20	149	271	231	144	82	46	24	16	7	5	6
11	32	176	292	235	105	62	40	17	16	9	8	7
12	43	257	353	180	39		34	57	37			

Girls

	1	2	3	4	5	6	7	8	9	10	11	12
5									1000			
6					518	482						
7	49	145	104	148	98	51	94	94	49	116	51	
8	81	85	160	161	151	128	137	64	19	4		9
9	19	130	241	224	155	95	54	36	21	10	6	8
10	18	147	267	230	153	85	45	25	13	7	5	5
11	21	166	296	205	128	78	34	30	18	11	7	7
12		83	272	337	175	23	35		75			

Boys	X	N	M
5	1031	4210	4.625
6	477	13900	5.484
7	278	61520	5.228
8	299	346940	5.106
9	130	2590908	4.412
10	65	3928497	4.113
11	62	153670	3.924
12	21	5809	3.557

Girls	X	N	M
5	5286	2060	9.000
6		4270	5.482
7	208	43100	5.618
8	220	215470	4.695
9	67	2492003	4.369
10	36	4902754	4.125
11	34	220984	4.072
12		5759	4.263

Note--See page D-2 (Notes To Appendix D)

232. What do you <u>expect</u> to do about military service?

1. Never serve because I am a girl
2. Quit high school to enlist
3. Enlist right after high school
4. Work for a commission through a college ROTC program, military school, or one of the service academies
5. Enlist after I have completed some college training
6. Enlist after I have graduated from college
7. Enlist after I have worked for several years
8. .Enlist in the Reserves or National Guard
9. Wait until I am drafted
10. Never serve because I do not think I can pass the physical examination
11. Never serve for other reasons
12. I have no idea what I will do about military service.

Boys

	1	2	3	4	5	6	7	8	9	10	11	12
5						525						475
6	152		159		459				144			86
7	71	130	298	73	76	38	37	73	72	35		96
8	41	84	197	121	68	103	59	19	30	38	26	214
9	11	29	273	115	63	110	28	33	65	21	19	233
10	6	11	240	145	59	124	24	31	68	18	22	251
11	6	10	158	175	50	124	27	32	92	21	36	269
12		40	143	81	273			59	105	42		258

Girls

	1	2	3	4	5	6	7	8	9	10	11	12
5	1000											
6	518											482
7	801	51			48							100
8	698		38	48	13	25	26	11		12	10	121
9	835	4	22	7	10	11	4	2	2	2	7	94
10	887	1	14	3	7	7	4	1	1	1	5	69
11	892	1	11	4	6	7	6	1	1		3	68
12	977								23			

Boys	X	N
5	1031	4210
6	477	13900
7	370	57410
8	334	337760
9	159	2524045
10	88	3848102
11	74	151944
12	44	5679

Girls	X	N
5	5286	2060
6		4270
7	207	43150
8	367	192400
9	89	2441204
10	43	4866593
11	31	221712
12		5759

Note--See page D-2 (Notes To Appendix D)

235. In which branch of the service do you expect to serve?

1. I do not expect to serve, for physical reasons.
2. I do not expect to serve, for reasons other than physical
3. Army
4. Air Force
5. Navy
6. Marine Corps

7. Coast Guard
8. Army Reserves or National Guard
9. Air Force Reserves or National Guard
10. Navy Reserves
11. Marine Corps Reserves
12. Coast Guard Reserves

Boys

	1	2	3	4	5	6	7	8	9	10	11	12
5			1000									
6			86	152	159	148	311			144		
7	69		267	106	72	130	35	108	104	73		36
8	103	94	150	183	117	165	45	34	51	25	13	20
9	39	60	206	253	210	120	33	29	18	11	11	10
10	32	56	224	254	235	104	32	25	14	8	8	7
11	37	78	267	249	212	77	26	18	1C	7	15	4
12	63	46	331	298	182	80						

Girls

	1	2	3	4	5	6	7	8	9	10	11	12
5		1000										
6	518	482										
7	510	194	99		97			51				49
8	317	344	2	86	82	79		14	13	24	24	15
9	259	598	23	39	46	16	3	4	5	2	3	2
10	257	646	15	29	35	11	2	1	1	1	1	1
11	337	576	13	26	26	14	4	1	2	2		1
12	207	766										27

Boys	X	N
5	2869	2210
6	477	13900
7	324	59410
8	366	329870
9	184	2472380
10	104	3790644
11	73	152160
12	44	5679

Girls	X	N
5	5286	2060
6		4270
7	2C6	43200
8	500	175330
9	157	2297831
10	10C	4617121
11	126	202957
12	214	4742

237. Which <u>one</u> of the following <u>best</u> describes the college you expect to attend?

1. I do not expect to go to college.
2. A teachers college
3. An agricultural college
4. An engineering college
5. A liberal arts college
6. A college specializing in music or fine arts
7. A university which includes many of the above colleges
8. Some other type of college
9. I have no plans regarding the type of college I will attend.

Boys

	1	2	3	4	5	6	7	8	9
5									1000
6	189	103		180	176		180		171
7	308	56	69	76	107	106	72	103	103
8	336	47	73	154	45	34	64	102	144
9	293	27	54	174	44	29	127	113	139
10	244	33	42	190	55	21	160	125	129
11	209	30	27	181	136	16	189	114	97
12	72			210	351		154	155	59

Girls

	1	2	3	4	5	6	7	8	9
5								1000	
6	1000								
7	568	103			57				272
8	515	22	13	41	92	36	23	87	170
9	377	87	7	3	36	24	127	163	170
10	344	96	5	5	64	25	146	176	138
11	276	112	1	5	160	18	186	131	111
12	257	100			396	22	167	22	37

Boys	X	N
5	1031	4210
6	756	11690
7	324	59410
8	405	320840
9	187	2465903
10	102	3796344
11	72	152187
12		5929

Girls	X	N
5	5286	2060
6		4270
7	341	38830
8	405	187230
9	103	2410290
10	53	4822428
11	46	218467
12	38	5547

238. How old do you expect to be when you get married?

1. I am already married.
2. 17 years old or younger
3. 18 years old
4. 19 years old
5. 20 years old
6. 21 or 22 years old
7. 23 or 24 years old
8. 25 or 26 years old
9. 27 to 29 years old
10. 30 to 35 years old
11. 36 or older
12. I don't expect to marry.

Boys

	1	2	3	4	5	6	7	8	9	10	11	12
5					525			475				
6				148	159	152	311					230
7		75	37	73	249	38	40	147	37			303
8	13	62	93	117	106	222	69	91	56	16	13	143
9	12	14	34	54	114	242	206	119	40	15	8	143
10	7	9	18	40	102	261	240	134	42	13	5	128
11	2	13	10	25	96	244	263	161	56	20	5	105
12			21		22	219	243	268	84			142

Girls

	1	2	3	4	5	6	7	8	9	10	11	12
5						1000						
6			482			518						
7	51	94	49	51	189	272	99	100	47			47
8	36	68	115	157	217	207	44	23	36	11		87
9	6	39	85	128	180	281	157	52	14	3	2	52
10	3	31	80	108	179	313	179	54	11	3	1	39
11	1	27	59	83	185	339	194	60	15	5	2	29
12			38	21	162	468	201	37				73

Boys	X	N	M
5	1031	4210	6.425
6	477	13900	7.237
7	370	57410	7.456
8	458	309090	6.474
9	211	2417496	7.080
10	114	3755703	7.173
11	76	151713	7.252
12	21	5809	7.801

Girls	X	N	M
5	5286	2060	6.000
6		4270	4.553
7	211	42990	5.645
8	427	184320	5.438
9	108	2398700	5.756
10	56	4808597	5.797
11	52	217282	5.916
12	21	5639	6.396

239. If all your plans work out as they should, how much money _per year_ would you _expect_ to be earning _twenty years_ after you graduate from high school?

1. $2,500 or less
2. $2,500 to $5,000
3. $5,000 to $7,500
4. $7,500 to $10,000
5. $10,000 to $12,500
6. $12,500 to $15,000

7. $15,000 to $17,500
8. $17,500 to $20,000
9. $20,000 to $22,500
10. $22,500 to $25,000
11. $25,000 or more

Boys

	1	2	3	4	5	6	7	8	9	10	11
5	525					475					
6			102	175				187	187		349
7	252	142	106	73	69	112	35	37	68	34	73
8	167	122	104	73	123	65	90	26	80	7	142
9	48	82	134	152	130	100	76	62	52	33	130
10	29	60	128	172	144	107	81	65	56	33	126
11	12	57	105	135	138	115	70	86	71	33	178
12		81	132	145	90	117	196	23	23		192

Girls

	1	2	3	4	5	6	7	8	9	10	11
5											1000
6			1000								
7	543	68	64	68			65	62			130
8	243	267	49	37	41	117	51	117	17	11	49
9	148	177	169	133	89	69	44	43	35	25	67
10	108	172	202	151	103	69	47	42	33	17	55
11	78	149	223	138	125	70	47	42	39	18	71
12	171	241	53	102	106	86	27	47	72	47	47

Boys

	X	N	M
5	1031	4210	3.375
6	741	11790	8.025
7	324	59410	4.455
8	432	314800	5.213
9	275	2295631	5.731
10	173	3567078	5.882
11	123	145282	6.469
12	135	5226	6.170

Girls

	X	N	M
5	5286	2060	11.000
6	1073	2060	3.000
7	608	32390	3.523
8	566	167980	4.080
9	291	2058693	4.361
10	229	4133222	4.328
11	207	189394	4.620
12	276	4514	4.468

240. How much money is the <u>least</u> amount of earnings (per year) that would <u>satisfy</u> you in the twentieth year after you graduate from high school?

1. $2,500 or less	7. $15,000 to $17,500
2. $2,500 to $5,000	8. $17,500 to $20,000
3. $5,000 to $7,500	9. $20,000 to $22,500
4. $7,500 to $10,000	10. $22,500 to $25,000
5. $10,000 to $12,500	11. $25,000 or more
6. $12,500 to $15,000	

Boys

	1	2	3	4	5	6	7	8	9	10	11
5						525					475
6	311		245						152		292
7	229	60	38	113	157	60	76	77	36	39	115
8	220	93	207	71	20	101	48	28	44	27	142
9	81	142	193	159	111	68	60	41	35	24	86
10	57	128	213	183	132	72	59	40	30	19	66
11	46	110	176	186	149	82	71	51	33	17	79
12	24	100	301	164	275	44	22	24			47

Girls

	1	2	3	4	5	6	7	8	9	10	11
5											1000
6				1000							
7	610	68	64		62	68	65		62		
8	282	164	68	63	52	38	103	105	37	12	73
9	224	214	169	117	77	45	33	32	22	17	49
10	195	229	205	127	75	43	33	26	20	11	35
11	160	221	209	139	98	44	41	18	17	11	43
12	319	150	119	82	201	27	47		27	29	

Boys	X	N	M
5	1031	4210	8.375
6	477	13900	5.626
7	427	55100	5.182
8	501	300310	4.797
9	259	2324018	4.796
10	161	3603394	4.706
11	118	146018	5.017
12	83	5477	4.284

Girls	X	N	M
5	5286	2060	11.000
6	1073	2060	4.000
7	613	32280	2.674
8	589	165490	4.391
9	282	2073179	3.680
10	214	4182181	3.522
11	193	191562	3.706
12	276	4514	3.325

241. How many different times have you been sick in bed (as much as a day) in the past year?

1. None	4. Five or six
2. One or two	5. Seven or eight
3. Three or four	6. Nine or more

Boys

	1	2	3	4	5	6	X	N	M
5	525	475					1031	4210	1.475
6	148	159	230	463			477	13900	3.007
7	245	286		252	37	180	324	59410	3.090
8	256	279	154	97	95	119	394	323260	2.851
9	284	380	172	71	31	62	167	2507635	2.372
10	299	418	163	60	24	35	79	3879482	2.197
11	303	450	143	52	24	28	39	157090	2.128
12	137	553	219	57	34			5929	2.298

Girls

	1	2	3	4	5	6	X	N	M
5						1000	5286	2060	6.000
6		1000					1073	2060	2.000
7	173	432	57	181	54	103	343	38780	2.820
8	182	363	214	80	55	107	435	183310	2.783
9	213	378	196	87	41	85	85	2448815	2.620
10	209	405	197	83	41	65	34	4910734	2.539
11	200	420	183	96	39	61	34	221105	2.535
12	172	506	145	95	59	23	21	5639	2.433

243. Which one of the following best describes your usual health in the last three years?

1. Excellent	4. Average
2. Very good	5. Poor
3. Good	6. Very poor

Boys

	1	2	3	4	5	6	X	N	M
5		525				475	1031	4210	3.900
6		186	278	359	177		725	11900	3.528
7	141	214	304	306	35		324	59410	2.880
8	195	323	196	194	42	50	463	308050	2.715
9	304	358	201	110	21	7	181	2477901	2.204
10	344	392	171	79	10	3	85	3857285	2.029
11	365	398	145	75	13	4	42	156705	1.982
12	369	456	137	38				5929	1.843

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6		1000					1073	2060	2.000
7	123	317	179	204	58	119	504	34620	3.112
8	115	366	213	244	61		433	183510	2.770
9	218	394	207	153	25	4	93	2432430	2.382
10	272	410	185	114	18	1	38	4891326	2.199
11	289	396	175	121	16	3	36	220695	2.186
12	257	422	177	144			61	5426	2.208

Items 248-283. For the following questions, mark your answers as follows:

    1. Yes
    2. No

248. Do you wear glasses all the time?

    1. Yes
    2. No

Boys

	1	2	X	N	M
5		1000	1031	4210	2.000
6	86	914	477	13900	1.914
7	202	798	372	57310	1.798
8	137	863	466	307420	1.863
9	158	842	194	2450677	1.842
10	167	833	93	3830535	1.833
11	159	841	45	156123	1.841
12	174	826		5929	1.826

Girls

	1	2	X	N	M
5		1000	5286	2060	2.000
6		1000	1073	2060	2.000
7	267	733	343	38780	1.733
8	213	787	474	178380	1.787
9	184	816	101	2414100	1.816
10	182	818	42	4873654	1.818
11	159	841	41	219495	1.841
12	68	932	61	5426	1.932

249. Do you have trouble seeing things from a distance?

    1. Yes
    2. No

Boys

	1	2	X	N	M
5		1000	1031	4210	2.000
6	841	159	477	13900	1.159
7	361	639	424	55200	1.639
8	336	664	481	304400	1.664
9	221	779	190	2458432	1.779
10	231	769	90	3837926	1.769
11	250	750	51	155296	1.750
12	275	725		5929	1.725

Girls

	1	2	X	N	M
5	1000		5286	2060	1.000
6		1000	1073	2060	2.000
7	171	829	420	36680	1.829
8	354	646	500	175340	1.646
9	353	647	100	2415162	1.647

250. Do you wear glasses for special purposes (reading, TV, etc.)?

1. Yes
2. No
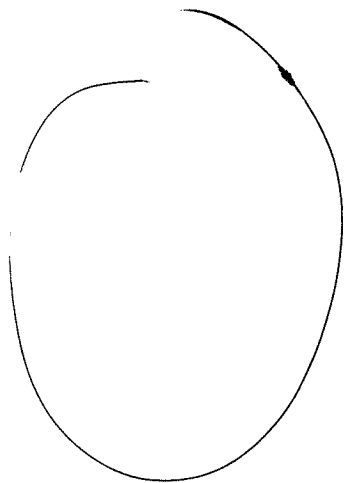
Boys

	1	2	X	N	M
5		1000	1031	4210	2.000
6	101	899	725	11900	1.899
7	119	881	481	53090	1.881
8	193	807	458	309150	1.807
9	170	830	192	2455602	1.830
10	181	819	92	3831976	1.819
11	229	771	51	155274	1.771
12	100	900		5929	1.900

Girls

	1	2	X	N	M
5		1000	5286	2060	2.000
6		1000	1073	2060	2.000
7	231	769	420	36680	1.769
8	333	667	465	179510	1.667
9	269	731	102	2411020	1.731
10	311	689	44	4866142	1.689
11	326	674	40	219877	1.674
12	373	627	61	5426	1.627

251. Do you have trouble hearing people talk?

1. Yes
2. No

Boys

	1	2	X	N	M
5		1000	2869	2210	2.000
6	543	457	734	11840	1.457
7	288	712	372	57310	1.712
8	213	787	459	308890	1.787
9	82	918	193	2452201	1.918
10	55	945	93	3827625	1.945
11	53	947	52	155219	1.947
12	67	933		5929	1.933

Girls

	1	2	X	N	M
5		1000	5286	2060	2.000
6		1000	1073	2060	2.000
7	61	939	504	34620	1.939
8	111	889	482	177400	1.889
9	76	924	104	2407519	1.924
10	58	942	43	4866843	1.942
11	58	942	40	219763	1.942
12	98	902	61	5426	1.902

252. Are you hard of hearing?

    1. Yes
    2. No

Boys

	1	2	X	N	M
5	475	525	1031	4210	1.525
6		1000	725	11900	2.000
7	235	765	481	53100	1.765
8	160	840	470	306550	1.840
9	64	936	241	2358173	1.936
10	36	964	129	3705654	1.964
11	41	959	84	150540	1.959
12		1000	37	5717	2.000

Girls

	1	2	X	N	M
5		1000	5286	2060	2.000
6		1000	1073	2060	2.000
7	109	891	420	36680	1.891
8	74	926	486	176980	1.926
9	39	961	149	2312420	1.961
10	27	973	78	4710172	1.973
11	34	966	70	213698	1.966
12	23	977	102	5226	1.977

255. Is your speech easily understood?

    1. Yes
    2. No

Boys

	1	2	X	N	M
5	1000		1031	4210	1.000
6	852	148	477	13900	1.148
7	575	425	424	55210	1.425
8	615	385	486	303300	1.385
9	743	257	200	2438588	1.257
10	785	215	97	3815989	1.215
11	792	208	56	154521	1.208
12	812	188	39	5709	1.188

Girls

	1	2	X	N	M
5	1000		5286	2060	1.000
6	1000		1073	2060	1.000
7	623	377	606	32420	1.377
8	725	275	504	174880	1.275
9	792	208	106	2402774	1.208
10	828	172	44	4861742	1.172
11	832	168	47	218281	1.168
12	855	145	61	5426	1.145

274. Do you often get severe headaches?

    1. Yes
    2. No

Boys

	1	2	X	N	M
5	1000		3275	2000	1.000
6	899	101	734	11840	1.101
7	604	396	616	48670	1.396
8	271	729	521	296420	1.729
9	164	836	251	2338869	1.836
10	120	880	125	3719409	1.880
11	101	899	72	152268	1.899
12	123	877		5929	1.877

Girls

	1	2	X	N	M
5		1000	5286	2060	2.000
6		1000	1073	2060	2.000
7	473	527	846	28210	1.527
8	608	392	546	170110	1.392
9	280	720	138	2335383	1.720
10	236	764	64	4774395	1.764
11	232	768	55	216738	1.768
12	151	849	61	5426	1.849

295. Do you have a car of your own, or one that is mostly for your use?

    1. Yes
    2. No

Boys

	1	2	X	N	M
5	1000		3275	2000	1.000
6	148	852	477	13900	1.852
7	200	800	917	41020	1.800
8	254	746	659	271650	1.746
9	167	833	324	2209986	1.833
10	163	837	156	3619711	1.837
11	166	834	94	149159	1.834
12	103	897		5929	1.897

Girls

	1	2	X	N	M
5		1000	5286	2060	2.000
6		1000	1073	2060	2.000
7	100	900	1607	19980	1.900
8	85	915	793	146690	1.915
9	92	908	179	2253445	1.908
10	94	906	75	4724831	1.906
11	99	901	60	215666	1.901
12	147	853	61	5426	1.853

297. Do you think you will quit high school before you graduate?

1. I definitely will leave.
2. I am almost sure to leave.
3. I am likely to leave.

4. I am not likely to leave.
5. I definitely will not leave.

Boys

	1	2	3	4	5	X	N	M
5			1000			3275	2000	3.000
6		311			689	477	13900	4.C68
7	230	173	117	358	122	1210	35580	2.969
8	133	165	184	124	394	573	286560	3.481
9	38	41	65	162	694	328	2204258	4.433
10	19	14	24	105	838	164	3595920	4.730
11	10	7	19	77	887	90	149793	4.823
12	56				944		5929	4.775

Girls

	1	2	3	4	5	X	N	M
5					1000	5286	2060	5.C00
6			1000			1073	2060	3.000
7			374	626		1369	21980	3.626
8	63	97	109	341	390	708	154010	3.900
9	26	19	38	170	746	184	2245550	4.591
10	17	9	19	113	842	77	4716851	4.753
11	14	6	3	98	880	57	216264	4.823
12	39				961	103	5220	4.842

298. After you leave high school, are you likely to go to a vocational school?

1. I definitely will go.
2. I am almost sure to go.
3. I am likely to go.

4. I am not likely to go.
5. I definitely will not go.

Boys

	1	2	3	4	5	X	N	M
5					1000	3275	2000	5.000
6			459	296	245	477	13900	3.786
7		176	232	356	237	1210	35580	3.653
8	59	198	242	268	233	635	275680	3.415
9	76	75	154	339	355	371	2134323	3.821
10	54	53	124	359	412	187	3525194	4.022
11	46	34	74	313	534	107	147385	4.254
12		22	105	173	701		5929	4.552

Girls

	1	2	3	4	5	X	N	M
5					1000	5286	2060	5.000
6					1000	1073	2060	5.000
7	91			490	419	1369	21980	4.146
8	77	89	119	369	346	784	147400	3.817
9	58	65	136	393	347	224	2171336	3.905
10	51	56	108	388	397	102	4609501	4.025
11	40	43	86	331	501	81	211499	4.210
12	80	41		425	454	103	5220	4.134

299. After you leave high school, are you likely to go to a business or commercial school?

    1. I definitely will go.   4. I am <u>not</u> likely to go.
    2. I am almost sure to go.   4. I definitely will <u>not</u> go.
    3. I am likely to go.

Boys

	1	2	3	4	5	X	N	M
5			1000			3275	2000	3.000
6	466	304	144		86	477	13900	1.937
7	56	236	242	345	121	1210	35580	3.239
8	129	137	214	295	225	648	273500	3.352
9	54	67	146	373	360	366	2143079	3.917
10	34	40	108	394	424	184	3534278	4.134
11	38	43	61	334	523	107	147440	4.262
12		22		207	771		5929	4.728

Girls

	1	2	3	4	5	X	N	M
5					1000	5286	2060	5.000
6			1000			1073	2060	4.000
7	91	182	192	308	227	1369	21980	3.399
8	88	73	197	382	261	786	147250	3.656
9	74	91	186	373	275	209	2199169	3.684
10	64	85	177	366	308	89	4661220	3.768
11	54	76	138	333	400	67	214188	3.948
12	80	25	83	360	452	103	5220	4.080

300. After you leave high school, are you likely to go to a junior college or a four-year college <u>part-time</u>?

    1. I definitely will go.   4. I am <u>not</u> likely to go.
    2. I am almost sure to go.   5. I definitely will <u>not</u> go.
    3. I am likely to go.

Boys

	1	2	3	4	5	X	N	M
5			1000			3275	2000	4.000
6		307	152	152	389	477	13900	3.623
7		179	239	404	178	1210	35580	3.580
8	121	124	231	307	217	563	288360	3.377
9	102	105	184	320	289	354	2161946	3.588
10	84	89	175	352	300	180	3546209	3.694
11	74	66	143	343	374	108	147323	3.878
12		84	20	304	591		5929	4.402

Girls

	1	2	3	4	5	X	N	M
5					1000	5286	2060	5.000
6			1000			1073	2060	4.000
7	91		91	500	318	1369	21980	3.955
8	82	70	91	470	287	757	149650	3.809
9	70	79	157	361	333	203	2208856	3.809
10	58	67	138	376	362	86	4675355	3.917
11	47	60	141	360	392	75	212607	3.990
12	133	40		440	397	78	5340	3.068

301. After you leave high school, are you likely to go to a junior college or
a four-year college full-time?

1. I definitely will go.   4. I am not likely to go.
2. I am almost sure to go.   5. I definitely will not go.
3. I am likely to go.

Boys

	1	2	3	4	5	X	N	M
5			1000			3275	2000	3.000
6	101	356		169	373	734	11840	3.356
7	66		185	367	381	1356	33370	3.998
8	145	116	204	331	205	643	274370	3.335
9	217	160	183	228	212	364	2145289	3.059
10	258	185	182	201	174	183	3539303	2.848
11	365	165	147	178	145	111	146969	2.573
12	578	186	108	95	34		5929	1.822

Girls

	1	2	3	4	5	X	N	M
5			1000			5286	2060	3.000
6				1000		1073	2060	4.000
7	91	182	101	399	227	1369	21980	3.490
8	116	72	91	395	326	805	145730	3.744
9	170	137	160	265	268	208	2199850	3.323
10	201	158	141	229	271	86	4674617	3.212
11	289	185	123	185	218	70	213618	2.857
12	488	303		148	61	103	5220	1.991

302. Which type of college are you more likely to attend?

1. Four-year college   3. I don't know which I will attend.
2. Junior college   4. I don't expect to go to college.

Boys

	1	2	3	4	X	N	M
5				1000	3275	2000	4.000
6	101	169	365	365	734	11840	2.993
7	136	64	342	458	1507	31370	3.122
8	170	156	240	433	655	272290	2.936
9	375	84	230	311	363	2146948	2.478
10	489	70	193	248	182	3539406	2.198
11	578	72	130	220	107	147448	1.991
12	780	81	67	72		5929	1.431

Girls

	1	2	3	4	X	N	M
5	1000				5286	2060	1.000
6				1000	1073	2060	4.000
7		91	467	442	1369	21980	3.351
8	116	60	185	639	810	145330	3.347
9	291	63	272	374	202	2211026	2.729
10	351	71	232	345	85	4680438	2.571
11	482	85	159	274	70	213581	2.226
12	711	41	148	101	103	5220	1.638

Note--See page D-2 (Notes To Appendix D)

303. When do you plan to start college?

    1. I don't plan to go to college.
    2. I plan to start college right after high school.
    3. I plan to start college after completing military service.
    4. I plan to start college after I have worked for a few years.
    5. I may go to college sometime in the future, but my plans are not definite.

Boys

	1	2	3	4	5	X	N
5	1000					3275	2000
6	187	458			356	734	11840
7	245	189	129	314	123	1348	33490
8	397	207	193	97	106	633	276050
9	273	417	129	57	124	375	2128605
10	229	517	100	42	112	188	3522665
11	205	640	54	27	74	116	146220
12	72	835		37	56		5929

Girls

	1	2	3	4	5	X	N
5					1000	5286	2060
6	1000					1073	2060
7	432	376		101	91	1369	21980
8	477	240	64	103	116	805	145730
9	365	457	16	38	125	208	2199410
10	341	517	8	31	103	88	4669004
11	279	601	7	31	82	67	214338
12	110	819	44		27	203	4786

304. What is the greatest amount of education you expect to have during your life?

    1. I don't expect to finish high school.
    2. I expect to graduate from high school.
    3. I expect to obtain vocational, business school, or junior college training.
    4. I expect to obtain some (less than 4 years) regular college training.
    5. I expect to graduate from a regular four-year college.
    6. I expect to study for advanced college degrees.

Boys

	1	2	3	4	5	6	X	N	M
5		1000					3275	2000	2.000
6		187	525	187		101	734	11840	3.304
7	194	198	200	204	70	133	1503	31420	3.159
8	177	385	162	138	70	68	657	271960	2.744
9	55	288	109	107	288	154	389	2106882	3.747
10	22	222	106	97	359	194	196	3498012	4.131
11	11	190	78	75	328	317	118	146044	4.469
12		72		126	325	477		5929	5.136

Girls

	1	2	3	4	5	6	X	N	M
5								0	
6	1000						1073	2060	1.000
7	203	586	111			100	1607	19980	2.308
8	161	492	181	45	75	45	886	139440	2.517
9	53	319	188	106	252	81	220	2177641	3.429
10	23	253	233	107	291	93	92	4648997	3.667
11	18	195	207	76	307	197	78	212039	4.049
12		184	25	64	384	344	103	5220	4.678

Note--See page D-2 (Notes To Appendix D)

305. Have you .taken, or do you expect to take, the National Merit Scholarship tests?

    1. No, I have not taken, nor do I expect to take these tests.
    2. Yes, I expect to take these tests.
    3. Yes, I have taken these tests.

Boys

	1	2	3	X	N	M
5			1000	3275	2000	3.000
6	365	280	356	734	11840	1.991
7	327	336	336	1507	31370	2.009
8	442	299	259	676	268960	1.817
9	515	390	95	420	2060607	1.579
10	455	475	70	211	3455276	1.614
11	379	424	197	124	145164	1.818
12	253	114	634		5929	2.381

Girls

	1	2	3	X	N	M
5		1000		5286	2060	2.000
6	1000			1073	2060	1.000
7	241	641	118	1979	17480	1.877
8	661	236	103	836	143270	1.443
9	615	358	27	251	2123852	1.412
10	546	420	34	109	4578427	1.488
11	445	340	215	82	211264	1.770
12	489	199	312	150	5009	1.823

306. If there were no other way for you to attend college, would you be willing to take out a loan which you would have to pay back after you graduate?

    1. Yes
    2. No

Boys

	1	2	X	N	M
5	1000		3275	2000	1.000
6	458	542	734	11840	1.542
7	415	585	2129	25130	1.585
8	374	626	671	269690	1.626
9	580	420	405	2083487	1.420
10	663	337	205	3473623	1.337
11	714	286	120	145752	1.286
12	832	168		5929	1.168

Girls

	1	2	X	N	M
5	1000		5286	2060	1.000
6	1000		1073	2060	1.000
7	422	578	1369	21980	1.578
8	459	541	830	143670	1.541
9	592	408	233	2155360	1.408
10	625	375	102	4608359	1.375
11	697	303	91	209550	1.303
12	762	238	150	5009	1.238

Note--See page D-2 (Notes To Appendix D)

337. How much education do your parents or guardians want you to have?

    1. They don't care whether I stay in high school.
    2. High school only.
    3. Vocational school, business school, or junior college.
    4. A college degree
    5. Professional or graduate school
    6. I don't know.

Boys

	1	2	3	4	5	6	X	N	M
5						1000	3275	2000	6.000
6	198	208	/	188		406	930	10640	3.802
7		329	508	82		82	2113	25260	2.998
8	75	273	240	192	50	171	1126	211970	3.383
9	32	144	133	429	79	182	678	1744312	3.926
10	16	93	109	526	94	161	382	3027965	4.074
11	13	77	105	488	193	124	274	128114	4.143
12				555	421	24	190	4984	4.469

Girls

	1	2	3	4	5	6	X	N	M
5					1000		5286	2060	5.000
6								0	
7		329		347	154	170	3012	12980	3.837
8	31	235	166	178	124	266	1094	125580	3.925
9	20	134	181	340	54	271	416	1876763	4.087
10	11	112	228	380	53	215	209	4201166	3.997
11	12	69	205	480	84	150	172	194986	4.006
12		127	90	616	100	67	150	5009	3.891

339. Do you think that you would <u>like</u> to make a lifetime career in the military service?

1. Like very much	4. Dislike a little
2. Like fairly well	5. Dislike very much
3. Indifferent	

Boys

	1	2	3	4	5	X	N	M
5				1000		3275	2000	4.000
6		198		406	396	930	10640	3.999
7	166	245	330	91	168	2108	25300	2.849
8	150	263	245	189	153	1146	209980	2.932
9	141	175	214	162	308	697	1724394	3.320
10	125	166	215	157	337	393	3005159	3.413
11	97	158	171	169	404	275	127983	3.625
12	43	131	24	161	641	162	5104	4.225

Girls

	1	2	3	4	5	X	N	M
5					1000	5286	2060	5.000
6							0	
7			170	501	329	3012	12980	4.159
8	161	109	167	111	453	1170	121170	3.585
9	58	85	191	99	568	476	1800081	4.034
10	41	70	190	95	604	252	4055237	4.150
11	35	57	211	93	604	214	188265	4.174
12			97	55	848	208	4769	4.751

Note--See page D-2 (Notes To Appendix D)

340. Do you think you will make a lifetime career in the military service?

1. Definitely will not
2. Very unlikely
3. Unlikely

4. Likely
5. Very likely
6. Definitely will

Boys

	1	2	3	4	5	6	X	N	M
5			1000				3275	2000	3.000
6		500	244			256	1376	8640	3.267
7	77	304	154	150	161	153	1873	27370	3.474
8	85	240	241	167	134	133	1320	194310	3.424
9	303	181	234	134	87	62	706	1715127	2.705
10	338	197	243	109	72	41	398	2992841	2.503
11	419	223	184	82	63	30	297	125878	2.235
12	749	96	44	66	44		190	4984	1.560

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	617			201	182		3743	10980	2.332
8	266	58	228	152	172	125	1327	113000	3.282
9	617	132	130	45	38	38	483	1791990	1.870
10	681	131	110	28	26	24	255	4046282	1.660
11	693	127	115	22	17	26	218	187666	1.622
12	723	44	207		25		208	4769	1.560

Items 342-346. What is the longest period of active duty time for which you would consider enlisting in each branch of the service? Mark your answers as follows:

342. Army

1. I would not consider enlisting in this branch.
2. Six months
3. Two years

4. Three years
5. Four years
6. Six years

Boys

	1	2	3	4	5	6	X	N	M
5						1000	3275	2000	6.000
6		188	406		406		930	10640	3.624
7		333	79	505		82	2125	25160	3.419
8	173	201	216	144	100	165	1154	209290	3.292
9	346	164	246	109	73	63	759	1663850	2.587
10	379	160	257	91	67	46	446	2894011	2.445
11	375	184	251	97	48	45	306	125018	2.393
12	377	321	252			50	245	4764	2.077

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	617	201	182				3743	10980	1.566
8	549	149	20	80	99	103	1286	115060	2.340
9	774	71	76	27	21	31	546	1718853	1.541
10	819	56	68	19	12	26	297	3915761	1.426
11	821	49	74	13	12	30	268	180247	1.437
12	803	32		32	29	104	412	4078	1.766

343. Navy

1. I would not consider enlisting in this branch.
2. Six months
3. Two years

4. Three years
5. Four years
6. Six years

Boys

	1	2	3	4	5	6	X	N	M
5					1000	3275	2000	6.000
6	198		198		396	208	930	10640	4.018
7	167	79	248	91	249	165	2112	25270	3.672
8	202	220	260	138	96	85	1206	204290	2.960
9	300	162	235	121	95	87	777	1647352	2.808
10	316	136	248	115	109	76	456	2874382	2.792
11	329	134	281	104	85	66	325	123185	2.682
12	370	220	297			113	245	4764	2.380

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	799		201				3743	10980	1.403
8	561	188	21	73	81	77	1239	117430	2.156
9	714	81	100	40	27	38	560	1703619	1.700
10	749	72	94	31	24	30	312	3870699	1.598
11	784	66	75	22	20	32	273	179518	1.525
12	803	32	29			136	412	4078	1.771

344. Air Force

1. I would not consider enlisting in this branch.
2. Six months
3. Two years

4. Three years
5. Four years
6. Six years

Boys

	1	2	3	4	5	6	X	N	M
5					1000		3275	2000	5.000
6	614	198				188	930	10640	2.138
7		419	163	173	165	79	2112	25270	3.322
8	117	211	265	184	93	131	1166	208080	3.317
9	280	143	223	125	111	118	779	1645054	2.997
10	291	119	235	124	127	104	461	2864358	2.990
11	325	111	251	111	108	94	329	122780	2.847
12	246	266	303	70		116	245	4764	2.661

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	617			201	182		3743	10980	2.332
8	546	212	102	96	40	4	1331	112810	1.882
9	732	70	90	38	28	41	564	1699072	1.685
10	766	61	82	33	25	32	313	3867936	1.586
11	790	51	83	26	21	29	284	178037	1.525
12	803	61		32		104	412	4078	1.678

345. Marine Corps

1. I would not consider enlisting in this branch.
2. Six months
3. Two years
4. Three years
5. Four years
6. Six years

Boys

	1	2	3	4	5	6	X	N	M
5			1000				3275	2000	3.000
6	208	198		396		198	930	10640	3.377
7		82	415	254	84	165	2112	25270	3.836
8	215	100	231	209	83	162	1180	206780	3.329
9	369	148	203	122	84	75	782	1642069	2.629
10	424	133	205	98	82	57	464	2859288	2.451
11	483	117	189	99	57	56	325	123139	2.297
12	482	175	222			122	245	4764	2.227

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	818	182					3743	10980	1.182
8	621	84	151	75	49	20	1284	115120	1.905
9	770	63	74	36	20	36	567	1695710	1.580
10	822	53	59	26	15	25	315	3862633	1.434
11	831	48	60	22	16	23	288	177466	1.413
12	803	64	29			104	412	4078	1.644

346. Coast Guard

1. I would not consider enlisting in this branch.
2. Six months
3. Two years
4. Three years
5. Four years
6. Six years

Boys

	1	2	3	4	5	6	X	N	M
5					1000		3275	2000	5.000
6	198		614			188	930	10640	3.167
7	166	171	91	328	79	165	2112	25270	3.478
8	245	219	180	179	91	85	1214	203550	2.906
9	412	170	192	101	67	59	793	1632498	2.418
10	449	154	194	85	69	49	462	2862314	2.319
11	473	153	199	82	39	53	320	123612	2.221
12	580	300	70			50	245	4764	1.691

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	1000						3743	10980	1.000
8	583	129	93	104	52	39	1327	113010	2.029
9	810	61	56	25	17	30	572	1690735	1.468
10	858	47	45	19	9	22	314	3865588	1.338
11	869	45	41	13	14	18	286	177785	1.310
12	832	32				136	412	4078	1.712

347. How many different occupations have you seriously considered entering?

1. None
2. One
3. Two

4. Three
5. Four
6. Five or more

Boys

	1	2	3	4	5	6	X	N	M
5				1000			3275	2000	4.000
6	198	198			396	208	930	10640	3.820
7		75	388	77	307	152	1873	27370	4.073
8	157	180	242	221	103	97	1216	203430	3.222
9	126	185	298	231	71	89	801	1625214	3.203
10	90	153	320	271	76	89	465	2856140	3.358
11	67	147	320	282	95	90	325	123187	3.460
12	75	130	227	516	26	26	303	4550	3.368

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	329	324	193	154			3012	12980	2.172
8	300	281	327	34	18	40	1205	119270	2.310
9	113	172	352	238	67	58	498	1773662	3.150
10	57	155	369	287	69	63	255	4046218	3.345
11	39	141	375	290	85	69	203	189943	3.447
12	44	172	228	404	99	52	259	4575	3.499

348. How definite is your present choice of an occupation?

1. Completely decided
2. Very definite
3. Fairly definite

4. Fairly indefinite
5. Very indefinite
6. Completely undecided

Boys

	1	2	3	4	5	6	X	N	M
5						1000	3275	2000	6.000
6	198		415	198		188	930	10640	3.366
7	77	81		537	73	232	1873	27370	4.144
8	151	174	172	206	30	266	1192	205640	3.589
9	106	161	351	162	89	131	826	1602870	3.359
10	85	146	384	173	92	119	476	2836006	3.397
11	89	157	367	158	107	123	331	122643	3.405
12	187	177	489	119		29	303	4550	2.655

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7		351	478			170	3012	12980	3.159
8	120	252	254	99	52	223	1163	121580	3.380
9	107	173	369	132	83	137	512	1758181	3.322
10	108	180	394	137	84	96	262	4023394	3.198
11	128	189	417	129	73	63	205	189672	3.019
12	107	270	376	125	79	44	259	4575	2.929

349. What grade were you in when you decided upon your present choice of an occupation?

1. I have not decided upon an occupation.   4. 9th grade
2. 6th grade or earlier   5. 10th grade
3. 7th or 8th grade   6. 11th or 12th grade

Boys

	1	2	3	4	5	6	X	N	M
5			1000				3275	2000	3.000
6			397		396	208	930	10640	4.414
7	152	233	223	155	84	153	1873	27370	3.245
8	190	136	323	181	75	95	1260	199430	3.099
9	209	107	305	312	33	34	836	1593958	2.955
10	227	65	166	306	220	18	487	2814070	3.280
11	214	42	112	148	259	225	333	122472	3.871
12	75	110	53	223	158	381	303	4550	4.423

Girls

	1	2	3	4	5	6	X	N	M
5			1000				5286	2060	3.000
6								0	
7	590	182	228				3743	10980	1.638
8	337	201	273	110	3	75	1244	117210	2.466
9	207	122	341	304	14	11	520	1748074	2.829
10	182	91	191	317	209	9	266	4009723	3.307
11	159	89	122	181	253	196	208	189237	3.867
12	44	125	45	203	150	433	259	4575	4.590

Items 350-355. How important will each of the following be to you in your choice of a job? Mark your answers as follows:

350. Good income to start or within a few years

1. Extremely important   4. Neither important nor unimportant
2. Very important   5. Unimportant
3. Important   6. Not important at all

Boys

	1	2	3	4	5	6	X	N	M
5					1000		3275	2000	5.000
6	415	198	386				930	10640	1.971
7	77	157	152	235	148	231	1873	27370	3.911
8	141	219	290	99	186	66	1377	189650	3.166
9	309	229	271	99	45	47	876	1559782	2.484
10	312	263	288	77	32	29	517	2758767	2.340
11	313	251	293	79	30	34	370	119125	2.363
12	311	165	314	181		29	338	4430	2.483

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	261	504		236			5142	8480	2.211
8	276	266	273	35	74	74	1243	117270	2.587
9	285	239	323	89	31	34	559	1704699	2.443
10	252	247	344	97	33	28	289	3939329	2.496
11	238	229	349	102	47	35	226	186486	2.594
12	146	99	327	151	181	96	259	4575	3.410

351. Job security and permanence

1. Extremely important
2. Very important
3. Important

4. Neither important nor unimportant
5. Unimportant
6. Not important at all

Boys

	1	2	3	4	5	6	X	N	M
5	1000						3275	2000	1.000
6	250		262		237	250	1435	8430	3.725
7	136	217	211	143	222	70	1677	29370	3.309
8	131	336	228	160	22	123	1404	187450	2.977
9	293	284	246	94	40	43	894	1545367	2.433
10	335	321	233	59	25	27	528	2738638	2.199
11	359	307	225	53	31	25	377	118506	2.165
12	308	396	165	104		27	338	4430	2.173

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	228	201	370	201			3743	10980	2.545
8	234	358	126	131		150	1241	117330	2.756
9	279	313	286	67	25	29	576	1686208	2.335
10	271	330	290	64	22	23	295	3922692	2.305
11	270	322	279	80	29	19	236	184879	2.334
12	219	296	208	52	126	98	259	4575	2.866

352. Work that seems important to me

1. Extremely important
2. Very important
3. Important

4. Neither important nor unimportant
5. Unimportant
6. Not at all important

Boys

	1	2	3	4	5	6	X	N	M
5		1000					3275	2000	2.000
6			198	198	396	208	930	10640	4.613
7	87	242	340	165		166	2112	25270	3.247
8	191	222	245	176	65	102	1352	191640	3.008
9	331	276	230	86	37	40	900	1540290	2.342
10	380	309	214	56	20	22	535	2727275	2.094
11	439	304	182	52	7	16	372	118958	1.930
12	497	133	247	123			338	4430	1.996

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	429	571					3743	10980	1.571
8	184	392	202	54	19	150	1246	117080	2.781
9	411	303	205	44	15	22	575	1687056	2.014
10	449	315	184	32	8	12	297	3914164	1.872
11	483	319	161	22	8	8	236	184952	1.777
12	549	381	26			44	259	4575	1.652

353. Freedom to make my own decisions

1. Extremely important
2. Very important
3. Important

4. Neither important nor unimportant
5. Unimportant
6. Not important at all

Boys

	1	2	3	4	5	6	X	N	M
5						1000	3275	2000	6.000
6			406	198		396	930	10640	4.385
7	225	233	155	77	235	76	1873	27370	3.090
8	185	226	267	122	131	70	1414	186730	2.997
9	303	256	245	106	46	44	908	1534037	2.468
10	296	294	260	91	28	30	536	2724708	2.352
11	326	274	281	81	20	19	382	118144	2.251
12	266	208	169	179	125	52	338	4430	2.845

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	410		201	389			3743	10980	2.569
8	211	289	213	134		152	1330	112860	2.881
9	284	273	283	104	30	27	581	1681048	2.403
10	252	286	291	119	31	21	302	3900312	2.456
11	265	299	258	139	22	17	239	184558	2.405
12	170	398	333	28	26	44	259	4575	2.474

354. Opportunity for promotion and advancement in the long run

1. Extremely important
2. Very important
3. Important

4. Neither important nor unimportant
5. Unimportant
6. Not at all important

Boys

	1	2	3	4	5	6	X	N	M
5						1000	3275	2000	6.000
6		406			198	396	930	10640	4.178
7	163	167	332	339			2112	25270	2.847
8	195	154	296	204	81	70	1405	187380	3.031
9	331	261	222	95	45	46	924	1521258	2.402
10	370	288	208	70	29	36	545	2709426	2.205
11	427	266	197	55	22	32	373	118885	2.074
12	217	387	217	48		132	338	4430	2.622

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	228	188	383		201		3743	10980	2.760
8	160	330	287	89	56	78	1239	117480	2.787
9	303	280	251	96	35	35	586	1675953	2.385
10	305	289	252	98	29	27	306	3889188	2.339
11	315	287	252	95	30	20	238	184579	2.297
12	127	269	201	250	109	44	259	4575	3.077

355. Meeting and working with sociable, friendly people

1. Extremely important
2. Very important
3. Important

4. Neither important nor unimportant
5. Unimportant
6. Not at all important

Boys

	1	2	3	4	5	6	X	N	M
5						1000	3275	2000	6.000
6			198	386	208	208	930	10640	4.425
7	165	163	250	173	83	166	2112	25270	3.346
8	177	269	237	133	136	48	1391	188520	2.926
9	282	251	245	121	51	50	930	1516014	2.557
10	293	271	261	104	34	37	549	2701431	2.428
11	313	266	241	106	38	36	380	118242	2.401
12	86	179	450	233	52			338	4430	2.987

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	429		201	370			3743	10980	2.512
8	281	213	249	138	57	62	1324	113170	2.663
9	410	270	219	60	19	23	592	1669720	2.076
10	435	275	209	49	15	16	306	3888184	1.983
11	440	278	196	60	16	10	234	185301	1.964
12	407	237	148	85		122	296	4445	2.400

Items 356-361. Imagine that you have been working for an employer for several years. How important do you think each of the following conditions would be in influencing you to quit to go to work for another employer? Mark your answers as follows:

356. If I could get better pay at another place

1. Extremely important
2. Very important
3. Important

4. Neither important nor unimportant
5. Unimportant
6. Not at all important

Boys

	1	2	3	4	5	6	X	N	M
5				1000			3275	2000	4.000
6			406	386		208	930	10640	4.009
7	253	163	335	85		164	2150	24960	2.909
8	187	193	326	144	79	72	1407	187270	2.952
9	223	215	328	124	57	54	952	1499340	2.738
10	206	221	370	117	49	38	565	2674590	2.697
11	193	199	419	105	46	38	398	116767	2.726
12	211	237	360	79	86	27	338	4430	2.674

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	201	201	415		182		3743	10980	2.760
8	149	213	356	119	82	80	1364	111260	3.012
9	192	210	370	129	56	42	609	1651644	2.774
10	167	206	394	142	57	34	317	3856464	2.814
11	155	188	397	146	75	39	259	181529	2.914
12	167	179	289	209	56	99	296	4445	3.105

357. If the work was not interesting enough

1. Extremely important
2. Very important
3. Important

4. Neither important nor unimportant
5. Unimportant
6. Not at all important

Boys

	1	2	3	4	5	6	X	N	M
5					1000		3275	2000	5.000
6		198				802	930	10640	5.405
7	167	82	332	252		168	2112	25270	3.341
8	133	151	298	155	168	95	1417	186450	3.361
9	210	245	286	133	62	64	962	1491940	2.782
10	247	277	299	99	42	36	572	2661928	2.519
11	309	298	266	73	24	30	400	116604	2.293
12	466	323	157	27		27	338	4430	1.853

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	228	403	182	188			3743	10980	2.330
8	91	208	338	172	56	135	1319	113420	3.298
9	239	264	308	100	46	44	621	1639734	2.584
10	271	297	301	72	31	28	323	3837042	2.381
11	268	326	289	67	24	26	269	180082	2.330
12	315	300	311	29		45	296	4445	2.235

358. If I could do more important work elsewhere

1. Extremely important
2. Very important
3. Important

4. Neither important nor unimportant
5. Unimportant
6. Not at all important

Boys

	1	2	3	4	5	6	X	N	M
5				1000			3275	2000	4.000
6		198	406			396	930	10640	3.989
7	151	230	316	151	78	73	1883	27270	2.996
8	188	266	210	212	93	30	1603	173180	2.846
9	237	255	268	129	60	51	973	1483530	2.673
10	241	289	279	113	41	36	579	2650658	2.533
11	264	300	256	113	32	34	407	115983	2.453
12	350	174	158	150	111	56	338	4430	2.667

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	429	182	188			201	3743	10980	2.564
8	160	369	322	62	45	42	1565	102520	2.588
9	267	268	285	105	43	32	629	1631287	2.484
10	277	300	268	98	33	24	327	3827426	2.381
11	294	274	278	99	36	19	272	179760	2.365
12	362	223	295		48	72	296	4445	2.364

359. If I had a poor supervisor

1. Extremely important
2. Very important
3. Important

4. Neither important nor unimportant
5. Unimportant
6. Not at all important

Boys

	1	2	3	4	5	6	X	N	M
5						1000	3275	2000	6.000
6		198		386	208	208	930	10640	4.227
7	77	152	381	77	238	75	1873	27370	3.473
8	176	189	296	138	85	116	1625	171690	3.116
9	196	236	271	155	68	75	975	1482151	2.886
10	195	240	310	153	55	47	583	2643171	2.775
11	175	229	335	163	62	36	410	115760	2.818
12	234	161	282	167	50	106	338	4430	2.957

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	201			201	188	410	3743	10980	4.403
8	184	342	153	140	78	102	1416	108850	2.891
9	232	240	300	127	56	45	634	1626165	2.670
10	227	263	306	121	45	39	329	3819512	2.609
11	198	254	311	145	62	30	283	178194	2.709
12	75	355	212	110	176	72	296	4445	3.174

360. If I didn't like my co-workers

1. Extremely important
2. Very important
3. Important

4. Neither important nor unimportant
5. Unimportant
6. Not important at all

Boys

	1	2	3	4	5	6	X	N	M
5						1000	3275	2000	6.000
6		208	397			396	930	10640	3.979
7	167		262	413		158	2113	25260	3.555
8	192	221	281	104	138	65	1594	173760	2.970
9	178	209	285	167	78	83	1002	1461449	3.007
10	182	229	310	163	65	52	593	2627881	2.857
11	201	221	313	162	51	51	419	115023	2.796
12	260	236	228	169	27	79	338	4430	2.705

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	201		370			429	3743	10980	3.884
8	203	181	284	144	106	82	1459	106940	3.013
9	169	216	314	162	76	63	660	1601437	2.949
10	175	228	315	170	64	50	345	3774190	2.869
11	182	245	315	143	79	37	293	176835	2.802
12	103	196	316	137	128	120	296	4445	3.353

361. If I did not receive expected promotions or salary increases

1. Extremely important
2. Very important
3. Important
4. Neither important nor unimportant
5. Unimportant
6. Not important at all

Boys

	1	2	3	4	5	6	X	N	M
5				1000			3275	2000	4.000
6		604		188		208	930	10640	3.207
7		252	323	175	168	82	2112	25270	3.504
8	197	160	240	240	110	52	1562	175930	3.063
9	214	231	280	138	66	70	995	1467215	2.820
10	218	257	303	129	50	43	593	2627820	2.665
11	252	265	292	121	34	37	432	113938	2.532
12	283	181	301	129	27	79	338	4430	2.674

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	201		201	188	182	228	3743	10980	3.832
8	144	302	137	231	103	82	1370	110960	3.092
9	158	202	329	172	80	59	649	1611641	2.992
10	152	207	334	182	71	54	339	3791800	2.975
11	154	181	369	172	77	47	289	177317	2.981
12	174	185	158	206	206	72	296	4445	3.301

362. How many children do you expect to have after you marry?

1. None
2. One
3. Two
4. Three
5. Four
6. Five or more

Boys

	1	2	3	4	5	6	X	N	M
5						1000	3275	2000	6.000
6	208		198	208	386		930	10640	3.565
7	177	276	190	89	177	89	2395	23160	3.080
8	113	129	276	285	92	106	1428	185650	3.434
9	118	80	324	269	128	81	1008	1457390	3.452
10	95	52	337	309	141	66	610	2599596	3.546
11	86	45	383	278	144	63	426	114420	3.537
12	81	28	449	227	138	77	379	4300	3.544

Girls

	1	2	3	4	5	6	X	N	M
5		1000					5286	2060	3.000
6								0	
7		188	812				3743	10980	2.812
8	156	90	401	147	147	60	1320	113360	3.219
9	49	56	338	234	229	94	611	1649847	3.821
10	36	40	292	268	255	110	322	3841866	3.996
11	33	25	281	284	244	133	257	181885	4.080
12	77		216	455	127	125	332	4325	3.930

363. How well off financially do you <u>hope</u> to be in your lifetime?

1. Able to provide the necessities	4. Wealthy
2. Comfortable	5. Very wealthy
3. Well-to-do	

Boys

	1	2	3	4	5	X	N	M
5		1000				3275	2000	2.000
6		812			188	930	10640	3.376
7	89	86	460	365		2379	23270	3.102
] 8	112	237	332	164	156	1497	180540	3.015
9	74	320	374	143	88	1020	1448973	2.850
10	45	338	425	133	59	603	2611401	2.823
11	34	326	407	169	64	428	114288	2.902
12		135	410	379	77	379	4300	3.397

Girls

	1	2	3	4	5	X	N	M
5			1000			5286	2060	3.000
6							0	
7		1000				4839	8920	2.000
] 8	186	234	426	101	52	1513	104630	2.598
] 9	67	470	338	84	41	623	1637707	2.563
10	37	506	356	72	28	325	3832493	2.547
11	39	465	375	87	35	248	183183	2.614
12	95	395	345	165		332	4325	2.578

364. How well off financially do you really <u>expect</u> to be in your lifetime?

1. Barely able to make a living	4. Well-to-do
2. Able to provide the necessities	5. Wealthy
3. Comfortable	6. Extremely wealthy

Boys

	1	2	3	4	5	6	X	N	M
5	1000						3275	2000	1.000
6	208	397				396	930	10640	3.375
7	165	334	173	328			2112	25270	2.663
8	120	173	324	241	92	50	1693	167340	3.162
9	39	141	435	267	71	47	1023	1446425	3.330
10	23	117	495	282	53	28	609	2601182	3.310
11	18	76	523	278	74	30	426	114442	3.404
12		27	421	392	86	74	338	4430	3.760

Girls

	1	2	3	4	5	6	X	N	M
5			1000				5286	2060	3.000
6								0	
7			776	224			4839	8920	3.224
8	85	311	321	146	96	40	1414	108940	2.977
9	20	155	576	192	36	21	633	1627510	3.132
10	15	135	627	188	24	10	331	3815037	3.102
11	13	116	631	203	30	7	263	180948	3.140
12	28	222	508	212	30		332	4325	2.994

365. For a man who has a wife and children, having a life insurance policy is

1. extremely important
2. very important
3. important

4. neither important nor unimportant
5. unimportant
6. not important at all

Boys

	1	2	3	4	5	6	X	N	M
5				1000			3275	2000	4.000
6	198		208	188	198	208	930	10640	3.811
7	258	162	249	249		82	2112	25270	2.817
8	293	246	209	85	84	84	1534	177850	2.674
9	614	161	109	57	33	26	1059	1421267	1.811
10	734	151	66	27	11	11	634	2562024	1.465
11	777	141	56	15	5	5	452	112396	1.344
12	729	156	115				338	4430	1.386

Girls

	1	2	3	4	5	6	X	N	M
5				1000			5286	2060	4.000
6								0	
7	528		472				4839	8920	1.944
8	443	244	125	103	44	41	1522	104290	2.186
9	727	168	70	17	8	10	660	1600691	1.441
10	784	153	47	8	3	5	348	3767503	1.305
11	786	159	47	2	3	2	278	178855	1.283
12	792	178				29	293	4455	1.324

366. Compared to your (or your future husband's) yearly salary, what is the greatest amount of life insurance you expect (or expect him) to have within ten years after you complete high school?

1. I do not expect (or expect him) to have a life insurance policy.
2. Up to an amount equal to ½ my (his) yearly salary
3. Up to an amount equal to my (his) yearly salary
4. Up to an amount equal to twice my (his) yearly salary
5. Up to an amount equal to three times my (his) yearly salary
6. Up to an amount equal to four or more times my (his) yearly salary.

Boys

	1	2	3	4	5	6	X	N	M
5	1000						3275	2000	1.000
6	396	198	208	198			930	10640	2.209
7	161	83	256	249	251		2112	25270	3.345
8	220	139	189	204	135	114	1626	171660	3.235
9	56	196	269	258	134	88	1273	1287557	3.483
10	39	191	299	257	123	92	808	2315363	3.510
11	34	183	334	245	100	104	608	101529	3.505
12	79	60	508	130	30	193	376	4310	3.551

Girls

	1	2	3	4	5	6	X	N	M
5		1000					5286	2060	2.000
6								0	
7	496	280	224				4839	8920	1.729
8	169	186	253	270	79	43	1529	104000	3.035
9	40	278	295	226	87	74	898	1400067	3.263
10	27	257	341	228	82	64	530	3318892	3.274
11	30	240	330	227	104	69	487	153745	3.344
12	140	88	282	268	187	35	530	3764	3.377

Note--See page D-2 (Notes To Appendix D)

367. Compared to your (or your future husband's) monthly salary, what is the <u>least</u> amount of money you expect (or expect him) to have in a savings account in the tenth year after you complete high school?

1. I do not expect (or expect him) to have a savings account
2. One month's salary or less
3. Up to 3 months' salary
4. Up to 6 months' salary
5. Up to 1 year's salary
6. More than 1 year's salary

Boys

	1	2	3	4	5	6	X	N	M
5						1000	3275	2000	6.000
6	208	198		198	396		930	10640	3.376
7	79		336	334	168	83	2112	25270	3.761
8	194	227	185	111	123	161	1596	173590	3.225
9	92	141	230	187	140	211	1304	1270343	3.774
10	63	106	208	187	179	257	843	2271243	4.083
11	71	67	153	219	210	280	634	99914	4.270
12			51	291	272	386	376	4310	4.992

Girls

	1	2	3	4	5	6	X	N	M
5	1000						5286	2060	1.000
6								0	
7	344			656			7112	6420	2.967
8	71	198	343	114	65	209	1586	101690	3.531
9	71	125	178	169	188	270	897	1400860	4.087
10	46	95	158	190	219	293	510	3362876	4.319
11	39	72	133	209	253	295	418	161258	4.449
12	58	97	97	310	73	365	680	3428	4.336

368. Compared to your (or your future husband's) monthly salary, what is the least amount of money you expect (or expect him) to have invested in securities (stocks and bonds) in the tenth year after you complete high school?

1. I do not expect (or expect him) to have invested in securities (stocks and bonds).
2. One month's salary or less
3. Up to 3 months' salary
4. Up to 6 months' salary
5. Up to 1 year's salary
6. More than 1 year's salary

Boys

	1	2	3	4	5	6	X	N	M
5					1000		3275	2000	5.000
6	406		208	198		188	930	10640	2.950
7	79	82	245	427		167	2112	25270	3.690
8	157	222	214	266	63	79	1725	165410	3.092
9	202	195	241	162	96	105	1345	1247929	3.069
10	236	181	226	161	93	103	884	2222032	3.003
11	245	153	215	176	107	103	670	97736	3.056
12	384	81	296	84	79	77	376	4310	2.622

Girls

	1	2	3	4	5	6	X	N	M
5						1000	5286	2060	6.000
6								0	
7	500	500					10783	4420	1.500
8	212	234	308	89	22	134	1731	96290	2.877
9	289	185	192	141	87	106	931	1376322	2.871
10	301	183	187	144	99	85	536	3305956	2.814
11	295	179	181	162	107	75	437	159074	2.835
12	378	86	62	267	174	34	485	3879	2.873

Note--See page D-2 (Notes To Appendix D)

369. Compared to your (or your future husband's) monthly salary, how much money do you expect (or expect him) to have invested in real estate? Do not include your own home.

   1. I do not expect (or expect him) to have invested in real estate, other than purchasing our own home.
   2. Up to an amount equal to my (his) monthly salary
   3. Up to an amount equal to 3 months' salary
   4. Up to an amount equal to 6 months' salary
   5. Up to an amount equal to 1 year's salary
   6. More than 1 year's salary

Boys

	1	2	3	4	5	6	X	N	M
5						1000	3275	2000	6.000
6	208	198	198	188		208	930	10640	3.197
7		161	500		171	168	2112	25270	3.684
8	314	153	167	158	142	66	1763	163140	2.860
9	319	176	192	129	76	109	1365	1237562	2.794
10	427	153	144	109	62	105	898	2204933	2.542
11	589	79	112	77	68	75	680	97132	2.179
12	707	28	60	77	81	46	376	4310	1.937

Girls

	1	2	3	4	5	6	X	N	M
5				1000			5286	2060	4.000
6								0	
7	656	344					7112	6420	1.344
8	176	271	205	109	47	192	1786	94380	3.156
9	494	177	115	73	58	83	943	1367937	2.273
10	594	131	93	66	51	66	547	3283212	2.045
11	646	110	84	52	50	59	442	158541	1.927
12	598	86	178		139		440	3999	1.996

370. Which one of the following tells best how you expect to pay for things you buy after you have started to earn a living?

   1. I expect always to pay cash for everything I buy.
   2. I expect to pay cash for everything except large purchases, such as a house, a car, etc.
   3. I expect to make large purchases (house, car, etc.) and some smaller purchases on the installment plan.
   4. I expect to buy many things on the installment plan.
   5. I expect to buy almost everything (except needs such as food, rent, etc.) on the installment plan.

Boys

	1	2	3	4	5	X	N	M
5					1000	3275	2000	5.000
6	614		198		188	930	10640	2.148
7	241	169	175	247	168	2112	25270	2.931
8	255	304	141	197	103	1658	169570	2.589
9	219	444	168	110	59	1250	1300694	2.346
10	220	525	146	77	32	792	2335229	2.176
11	274	558	86	53	30	575	103614	2.007
12	333	528	138			408	4210	1.805

Girls

	1	2	3	4	5	X	N	M
5					1000	5286	2060	5.000
6							0	
7		298	373	329		6762	6710	3.031
8	257	330	203	141	69	1923	89970	2.436
9	196	585	126	61	33	852	1435279	2.150
10	171	623	133	54	19	470	3454632	2.126
11	176	633	135	46	11	362	167837	2.082
12	114	667	30	156	33	440	3999	2.326

Note--See page D-2
(Notes To Appendix D)

371. Which one of the following statements tells best what you do about saving?

1. I save every cent I can, even if I have to do without some things I want.
2. I save whatever remains after I have bought most of the things I want.
3. I save a definite amount and spend whatever remains.
4. I save only after I have bought everything I want.
5. I save little or nothing.

Boys

	1	2	3	4	5	X	N	M
5	1000					3275	2000	1.000
6	198	406	396			930	10640	2.197
7	184	177	460	92	86	2395	23160	2.719
8	121	328	262	196	93	1798	161090	2.814
9	144	369	288	122	78	1295	1275186	2.620
10	131	418	302	99	50	818	2301759	2.520
11	71	499	285	101	44	603	101812	2.548
12	50	633	260	57		408	4210	2.324

Girls

	1	2	3	4	5	X	N	M
5					1000	5286	2060	5.000
6							0	
7	298	329		373		6762	6710	2.447
8	202	418	127	98	154	2065	85800	2.584
9	160	373	307	81	78	872	1419759	2.544
10	127	399	337	65	71	488	3413348	2.554
11	106	423	336	75	60	385	165009	2.560
12	86	583	222	30	80	440	3999	2.436

372. Which one of the following statements tells best what you expect to do about saving for the first 5 years after you start to earn a living?

1. I expect to save every cent I can, even if I have to do without some things I need.
2. I expect to save whatever remains after I have bought most of the things I want.
3. I expect to save a definite amount and spend whatever remains.
4. I expect to save only after I have everything I want.
5. I don't expect to save very much when I start earning a living.
6. I do not expect to save anything.

Boys

	1	2	3	4	5	6	X	N	M
5	1000						3275	2000	1.000
6	198	406				396	930	10640	3.384
7	187	443	189		180		2395	23160	2.543
8	138	285	209	175	90	103	1655	169770	3.102
9	171	321	314	106	53	35	1315	1264351	2.656
10	164	362	336	75	43	20	836	2279471	2.531
11	120	400	353	65	49	14	609	101467	2.565
12	195	334	386	29	57		408	4210	2.419

Girls

	1	2	3	4	5	6	X	N	M
5						1000	5286	2060	6.000
6								0	
7				702		298	6762	6710	
8	210	309	225	88	23	145	1842	92530	4.596
9	189	290	414	56	37	14	908	1392855	2.842
10	156	297	461	41	35	9	513	3355689	2.505
11	125	309	480	41	37	9	418	161204	2.582
12		584	363			53	521	3786	2.575

Note--See page D-2 (Notes To Appendix D)

373. Among the following, what is the one most important thing for which you are now saving?

    1. College   4. Clothes or recreational equipment
    2. Marriage   5. Something not listed above
    3. A car   6. I am not saving now.

Boys

	1	2	3	4	5	6	X	N
5			1000				3275	2000
6			604			396	930	10640
7	89	177	468	175	91		2395	23160
8	148	205	226	203	123	94	1689	167640
9	288	129	255	102	111	115	1315	1264126
10	384	87	244	70	111	104	837	2278468
11	511	61	162	64	94	108	636	99776
12	645	50	157	29	62	57	408	4210

Girls

	1	2	3	4	5	6	X	N
5						1000	5286	2060
6								0
7	373		627				6762	6710
8	192	257	152	97	118	184	2028	86840
9	288	117	74	155	128	238	900	1398579
10	312	107	60	147	147	227	509	3364379
11	387	90	40	135	129	219	400	163236
12	668		32	98	85	118	521	3786

374. Among the following, what is the one most important thing for which you expect to save after completing your education?

    1. A house or furniture   4. Marriage and family
    2. A car   5. Something not listed above
    3. Investment   6. I do not expect to save.

Boys

	1	2	3	4	5	6	X	N
5		1000					3275	2000
6	406		188			406	930	10640
7	272	366	180			181	2395	23160
8	201	163	185	204	192	54	1684	167900
9	215	146	133	299	151	55	1327	1257397
10	213	110	111	384	150	32	853	2258879
11	210	88	87	435	159	22	639	99587
12	229	32	86	487	167		453	4080

Girls

	1	2	3	4	5	6	X	N
5					1000		5286	2060
6								0
7		298		329		373	6762	6710
8	299	117	89	308	92	94	1854	92130
9	196	83	58	444	176	43	926	1379678
10	175	79	47	500	172	28	527	3325129
11	171	78	43	518	173	17	430	159860
12	286	32		431	251		521	3786

Note--See page D-2 (Notes To Appendix D)

A P P E N D I X   E

ESTIMATED PERCENTAGE DISTRIBUTIONS
OF SELECTED SCHOOL CHARACTERISTICS

For Public Secondary Schools in Various Categories

Estimated** Percentage Distribution of Types of Residences Served
(For Public Secondary Schools in Various Categories)

			Non-Vocational Schools		
		Vocational	Large	Other	
		Schools	Cities	Southeast	NE & W
Type of Residence	Tax.Gr.*⟶	(10)	(21-22) (31-32)	(51-54)	(41-44) (61-64)
Low-cost homes		21.9	7.2	33.0	26.2
Low-rent apartments		1.5	1.4	--	0.4
Low-income areas		6.6	19.3	21.3	7.4
Moderate-priced homes		45.6	55.1	39.8	59.8
Moderate-rent apartments		--	1.6	--	0.4
Expensive private homes		--	5.2	--	1.1
High-rent apartments		--	3.3	0.4	--
Equally apartments and homes		12.2	6.4	1.9	2.0
No estimate available		12.2	0.5	3.6	2.7
Total		100.0	100.0	100.0	100.0
Approximate number of TALENT schools		35	108	212	467

*See Appendix A, Part 2, for a description of the Taxonomy Groups.
**Estimates were obtained by applying School Weight B. (See Chapter II,
   Section C, for an explanation of these weights.)

Table E-2

Estimated** Percentage Distribution of Type of Area Served
(For Public Secondary Schools in Various Categories)

Type of Area	Vocational Schools (10)	Non-Vocational Schools		
		Large Cities (21-22) (31-32)	Other	
			Southeast (51-54)	NE & W (41-44) (61-64)
Tax.Gr.*—>				
Urban Residential	1.0	39.3	3.3	5.4
Urban Industrial	21.5	7.5	1.2	0.5
Urban Commercial	1.5	1.0	--	0.4
Suburban Residential	10.0	17.8	4.3	7.3
Suburban Industrial	10.0	--	1.9	2.1
Suburban Commercial	--	3.0	0.4	0.2
Scattered over city (greater than 5000)	21.0	14.9	12.6	7.8
Small town (less than 5000)	25.0	3.0	18.6	33.2
Rural--farm	--	--	52.9	38.6
Other	--	13.1	3.6	2.9
No estimate available	10.0	0.4	1.2	1.6
Total	100.0	100.0	100.0	100.0
Approximate number of TALENT schools	35	108	212	467

*See Appendix A, Part 2, for a description of the Taxonomy Groups.
**Estimates were obtained by applying School Weight B. (See Chapter II,
Section C, for an explanation of these weights.)

Table E-3

Estimated** Percentage Distribution of Percentage of Minority Group Students
(For Public Secondary Schools in Various Categories)

% Tax.Gr.*→	Latin-American				Negro			
		Non-Voc Schools				Non-Voc Schools		
	Voc.	Large	Other		Voc.	Large	Other	
	Schls.	Cities	SE	NE & W	Schls.	Cities	SE	NE & W
	(10)	(21-22)	(51-54)	(41-44)	(10)	(21-22)	(51-54)	(41-44)
		(31-32)		(61-64)		(31-32)		(61-64)
None	46.8	40.7	89.4	66.0	31.9	35.5	70.7	71.4
0-9%	43.7	51.4	9.7	27.6	57.6	26.6	3.3	23.2
10-19%	2.5	6.5	--	3.0	3.5	7.5	1.3	2.6
20-29%	3.0	0.5	--	0.6	3.5	11.1	--	0.2
30-39%	2.0	0.9	--	0.6	1.5	0.9	--	0.2
40-49%	0.5	--	--	0.6	1.5	0.5	--	--
50-59%	1.5	--	--	0.8	0.5	--	--	--
60-69%	--	--	--	0.2	--	--	--	0.2
70% +	--	--	0.9	0.6	--	17.9	24.7	2.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Approximate number of TALENT Schools	35	108	212	467	35	108	212	467

*See Appendix A, Part 2, for a description of the Taxonomy Groups.

**Estimates were obtained by applying School Weight B. (See Chapter II, Section C, for an explanation of these weights.)

Table E-4

Estimated** Percentage Distribution of Male Teachers' Starting Salary
(For Public Secondary Schools in Various Categories)

			Non-Vocational Schools		
		Vocational Schools	Large Cities	Other	
				Southeast	NE & W
Salary	Tax.Gr.*→	(10)	(21-22) (31-32)	(51-54)	(41-44) (61-64)
$5000 or more		--	5.9	--	0.9
$4500-5000		42.5	22.7	0.4	6.8
$4000-4500		46.0	49.1	0.4	53.4
$3500-4000		11.5	13.9	10.4	24.6
$3000-3500		--	8.4	34.0	13.5
$2500-3000		--	--	47.7	--
$2000-2500		--	--	7.1	0.4
$1500-2000		--	--	--	--
$1000-1500		--	--	--	0.4
Under $1000		--	--	--	--
Total		100.0	100.0	100.0	100.0
Median		$4418	$4282	$2950	$4104
Approximate number of TALENT schools		35	108	212	467

*See Appendix A, Part 2, for a description of the Taxonomy Groups.
**Estimates were obtained by applying School Weight B. (See Chapter II, Section C, for an explanation of these weights.)