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REFERENCE TABLES FOR THE ARMED SERVICES VOCATIONAL APTITUDE BAT--ETC(U)
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6 REFERENCE TABLES FOR THE
ARMED SERVICES VOCATIONAL APTITUDE BATTERY

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RESEARCH DIVISION

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Armed Forces Vocational Testing Group Technical Research Reports and Technical Research Notes are developed for primary use and reference by secondary school counselors and Department of Defense employed Armed Services Vocational Aptitude Battery (ASVAB) test administrators. This report is summarized in general terminology for field application by secondary school counselors and test administrators. Conclusions and recommendations are solely those of the primary authors and in no way represent either official policy of the military services or the Department of Defense.

Changes to AFVTG Technical Research Note 74 - 1 - Reference Tables for The Armed Services Vocational Aptitude Battery

Request the following changes be made by all holders of the above referenced Technical Note:

- a. Page Two - Section III b -
change 1973-74 to read 1974-75
- b. Table 23 - Area I
 - (1) Change the standard deviation (S) for tenth grade males (10-M) on Coding Speed (CS) from 13.56 to 13.36.
 - (2) Change the mean (M) for twelfth grade females (12-F) on Space Perception (SP) from 10.27 to 10.03.
- c. Table 23 - Area II - change the mean (M) for twelfth grade males (12-M) on Shop Information (SI) from 12.32 to 13.32.
- d. Table 23 - Area V
 - (1) Change the standard deviation (S) for twelfth grade males (12-M) on Tool Knowledge (TK) from 3.35 to 5.17.
 - (2) Change the mean (M) for twelfth grade females (12-F) on Tool Knowledge (TK) from 14.25 to 6.56.
 - (3) Change the standard deviation (S) for twelfth grade females (12-F) on Tool Knowledge (TK) from 5.17 to 3.72.
- e. Table 23 - Area VI
 - (1) Change the mean (M) for twelfth grade females (12-F) on Coding Speed (CS) from 59.99 to 57.00

(2) Change the standard deviation (S) for eleventh grade females (11-F) on Shop Information (SI) from 5.58 to 3.58.

f. Table 23 - Area VII

(1) Change the standard deviation (S) for twelfth grade males (12-M) on Tool Knowledge (TK) from 3.20 to 5.19.

(2) Change the mean (M) for twelfth grade females (12-F) on Tool Knowledge (TK) from 14.36 to 6.09.

(3) Change the standard deviation (S) for twelfth grade females (12-F) on Tool Knowledge (TK) from 5.20 to 3.26.

g. Table 23 - Area IX - change the standard deviation (S) for tenth grade females (10-F) on Arithmetic Reasoning (AR) from 6.34 to 5.34.

Preface

A primary responsibility of the Research Division, Armed Forces Vocational Testing Group is the summarization and distribution, via military service channels, of results of the Department of Defense High School Testing Program through timely and periodic technical research notes. This initial ~~research~~ report describes basic research findings--translated into subtest frequency distributions by grade and sex--for over 800,000 high school students tested on the Armed Services Vocational Aptitude Battery during school year 1972-73.

Data contained in this AFVVTG technical research note are intended for release, application, and reference by high school ASVAB users pending release of the 1974-75 edition of the high school counselor's manual.

The tabular information contained in this research note has been extracted from the historical ASVAB data tapes maintained by the Computational Sciences Division, Air Force Human Resources Laboratory, Air Force Systems Command, Lackland Air Force Base, Texas.

This technical research note has been conducted as a subpart of AFVVTG research project unit 100; under guidelines prescribed through Department of Defense Instruction 1304.12 (December 1972).

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Abstract

Pre-existing (prior to school year 1973-74) reference norms for the Armed Services Vocational Aptitude Battery (ASVAB) were predicated upon a representative sample of 3050 examinees, processed through Armed Forces Examining and Entrance Stations (AFEES) and stratified on the Armed Forces Qualification Test to produce a mobilization sample. The data were collected at 11 AFEES throughout the country to provide geographic sampling and were replicated (in terms of subtest means and standard deviations) in the 1973-74 edition of the ASVAB high school counselor's manual as a normative referant.

The present ASVAB reference data described in the present research note are based upon actual results of testing over 800,000 high school students during school year 1972-73. As such, the tabular summaries do not constitute *bona fide* ASVAB norms, representative of any national mobilization population, but do characterize actual test performance of students stratified by high school grade and sex, tested during school year 1972-73. Information contained in this technical research note as evidence of an expanded reference base for the ASVAB, is for release to individual high school counselors, pending distribution of the 1974-75 edition of the ASVAB Counselor's Manual.

Contents

	<i>Page</i>
I. Introduction and Background	
Standardization.....	1
AFQT-ASVAB Correlation.....	1
II. Development of Revised ASVAB Reference Statistics	
Initial Development.....	1
Revised Reference Statistics 1973-74	1
Interpretation.....	2
III. Relationship to Test Score Printout	
Gummed Label Revision.....	2
Counselor's Manual Revision	2

during school year 1972-73. As such, they are decidedly characteristic of all students tested - by subtest - on the ASVAB during the preceding school year. They do not, however, constitute, representative norms in that the 800,000 students tested do not accurately reflect all strata of any nation-wide population who might be expected to eventually take ASVAB (i.e., the nation-wide mobilization population). The attached tables do represent three dimensions of ASVAB test data not previously available:

- (1) Reference norms for students below the 12th grade level.
- (2) Separate norms for male-female by individual subtest.
- (3) ASVAB subtest descriptive statistics by separate geographic area.

c. **Interpretation:** During discussions with high school counselors/administrators, it should be stressed that the attached reference norms are not truly nation-wide mobilization population statistics. (To meet these criteria the data would need to be stratified on the various strata of urban-rural, ethnic group, sex, geographic region, economic grouping and similar demographic categories.) The percentages reported in the tables are, however, representative of the 800,000 + students who took ASVAB during school year 1972-73, and should be presented as such.

(1) Tables 9 through 17 reflect cumulative percentage scores (actual) by subtest, grade, and sex. For all tests, except Coding Speed, negative scores are possible since penalties are assigned for guessing, hence the possible occurrence of scores zero and below. These "look-up" tables are related to raw score performance since individual student raw scores are to be reported on the counselor's printout beginning with school year 1973-74. Counselor raw score interpretation is expected to be based upon subtest performance within specific sex and grade categories.

(2) Table 23 reports overall ASVAB subtest means and standard deviations by geographic region. To the extent that prescribed geographic regions represent competitive labor markets, these data are expected to serve as an overall occupational expectancy norm. Nation-wide ASVAB performance for school year 1973 (summarized by the number of students tested, by subtest, mean and standard deviation) are shown in Table 24.

III. RELATIONSHIP TO TEST PRINTOUT

a. **Gummed Label Revision:** As a companion to the attached revised ASVAB reference statistic tables, the computer produced gummed label printout for high school counselors is being revised to display similar information. The revised printout will show four scores for each student, for each subtest:

- Raw Score (Relate to Tables 9-17)
- Overall percentile based on all students tested nation-wide
- Overall percentile based on all students tested by grade
- Overall percentile based on all students tested by grade and sex

b. **Counselor's Manual Revision:** The 1973-74 edition of the ASVAB High School Counselor's Manual has been revised to incorporate reference statistics as shown in Tables 9 through 17 and Tables 23 and 24 (attached). These data were included in the revised edition to serve as basic "look-up" tables for both high school counselors and service test administrators.

Document is complete. There are no tables thru 8.

REFERENCES

- ¹Bayroff, A. G. & Fuchs, E. F., *The Armed Services Vocational Aptitude Battery*. U.S. Army Behavior and Systems Research Laboratory, Military Selection Research Division, Arlington, Virginia, February 1970. (Technical Research Report 1161)
- ²Armed Forces Vocational Testing Group, *1973-74 Counselor's Manual*. Randolph AFB, Texas (DOD 1304.12X)

