

NPRDC TR 85-15

DECEMBER 1984

AD-A149 695

**PREDICTIVE VALIDATION OF THE ARMED SERVICES
VOCATIONAL APTITUDE BATTERY (ASVAB) FORMS 8, 9,
AND 10 AGAINST PERFORMANCE IN 100 NAVY SCHOOLS**

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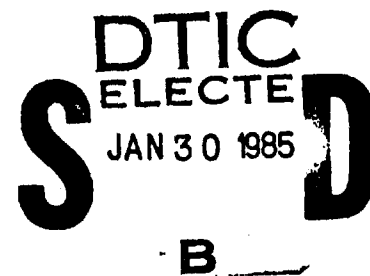
**PREDICTIVE VALIDATION OF THE ARMED SERVICES VOCATIONAL
APTITUDE BATTERY (ASVAB) FORMS 8, 9, AND 10 AGAINST
PERFORMANCE IN 100 NAVY SCHOOLS**

Stephanie Booth-Kewley
Paul P. Foley
Leonard Swanson

Reviewed by
James R. McBride

Approved by
Martin F. Wiskoff

Released by
J. W. Renard
Captain, U.S. Navy
Commanding Officer



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SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE					
1a REPORT SECURITY CLASSIFICATION UNCLASSIFIED		1b RESTRICTIVE MARKINGS	1c SECURITY CLASSIFICATION AUTHORITY		2b DECLASSIFICATION/DOWNGRADING SCHEDULE
3 DISTRIBUTION AVAILABILITY OF REPORT Approved for public release; distribution unlimited.				4 PERFORMING ORGANIZATION REPORT NUMBER(S) NPRDC TR 85-	
				5 MONITORING ORGANIZATION REPORT NUMBER(S)	
6a NAME OF PERFORMING ORGANIZATION Navy Personnel Research and Development Center				6b OFFICE SYMBOL <i>(if applicable)</i> Code 62	
6c ADDRESS (City, State and ZIP Code) San Diego, CA 92152-6800		7a NAME OF MONITORING ORGANIZATION		7b ADDRESS (City, State and ZIP Code)	
8a NAME OF FUNDING SPONSORING ORGANIZATION Chief of Naval Operations, Enlisted Programs Implementation Branch			8b OFFICE SYMBOL <i>(if applicable)</i> OP-135L	8c ADDRESS (City, State and ZIP Code) Washington, DC 20350	
9 PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	10 SOURCE OF FUNDING NUMBERS		PROJECT NO	TASK NO	WORK UNIT NO WRB2708
	PROGRAM ELEMENT NO				
11 TITLE (Include Security Classification) PREDICTIVE VALIDATION OF THE ARMED SERVICES VOCATIONAL APTITUDE BATTERY (ASVAB) FORMS 8, 9, and 10 AGAINST PERFORMANCE IN 100 NAVY SCHOOLS					
12 PERSONAL AUTHOR(S) Booth-Kewley, Stephanie, Foley, Paul P., and Swanson, Leonard					
13a TYPE OF REPORT Final		13b TIME COVERED FROM Oct 80 TO Oct 32		14 DATE OF REPORT (Year, Month, Day) 1984 December	15 PAGE COUNT 97
16 SUPPLEMENTARY NOTES Supplement available from NPRDC Code 62.					
17 COSATI CODES			18 SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB GROUP	Armed Services Vocational Aptitude Battery (ASVAB); ASVAB Forms 8, 9, and 10; test validation; predictive validation		
05	09				
19 ABSTRACT (Continue on reverse if necessary and identify by block number) <p>This predictive validation study was conducted to examine the effectiveness of Armed Services Vocational Aptitude Battery (ASVAB) Forms 8, 9, and 10, used since October 1980 for selection and classification of enlisted personnel. Bivariate and multiple correlation coefficients between the ASVAB predictors--individual tests, the Armed Forces Qualification Test (AFQT), and the Navy school selector composites--were computed for 47 "A" and 53 Basic Electricity and Electronics (BE/E) school samples. Expectancy tables were constructed for the 54 schools with sufficient data. In general, the operational Navy composites predicted technical school performance reasonably well. However, the analyses identified two schools for which a change in composite would substantially improve prediction of school performance.</p>					
20 DISTRIBUTION AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS			21 ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED		
22a NAME OF RESPONSIBLE INDIVIDUAL Stephanie Booth-Kewley			22b TELEPHONE (include Area Code) (619) 225-2181	22c OFFICE SYMBOL Code 62	

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FOREWORD

This research was conducted within work unit WRB2708 (Armed Services Vocational Aptitude Battery (ASVAB) Development and Validation) and was funded by the Enlisted Programs Implementation Branch (OP-135L) of the Chief of Naval Operations (MIPR N0002282 WR5900L). It was carried out in response to a request from the Classification Training Incentive Division of the Naval Military Personnel Command (NMPC-48) to determine the validity of the ASVAB selection criteria for Navy technical schools.

Results are intended for use by NMPC-48 and Navy technical school personnel as well as by the research community. This investigation represents part of an ongoing effort to assure the optimal use of human resources in the Navy by validating selection and classification standards against performance measures.

J. W. RENARD
Captain, U.S. Navy
Commanding Officer

J. W. TWEEDDALE
Technical Director

SUMMARY

Problem

The Armed Services Vocational Aptitude Battery (ASVAB) is the primary instrument used by the Navy to select and classify enlisted personnel. A variety of composites are derived from the ASVAB. One of these, the Armed Forces qualification Test (AFQT), is used to screen applicants for enlistment eligibility. Eleven other ASVAB composites are used to determine qualification of recruits for specific Navy technical schools.

The ASVAB went into operation as the common military selection and classification instrument in January 1976, with the implementation of ASVAB Forms 6 and 7. In October 1980, ASVAB Forms 8, 9, and 10 replaced ASVAB 6 and 7. Whereas the validity of ASVAB 6 and 7 has been studied extensively, and that of ASVAB 8, 9, and 10 has been studied for a few Navy schools, ASVAB 8, 9, and 10 has not yet been the subject of a large-scale validation effort that involves a wide variety of Navy technical schools.

It is important that the validity of operational ASVAB selector composites (including the AFQT) for predicting performance in Navy technical schools be evaluated periodically to ensure effective selection and classification of Navy enlisted personnel. In addition, professional standards for testing require that validity also be examined for sex and race subgroups, where sufficient data are available, to determine whether use of the ASVAB selectors results in differential prediction.

Objectives

The objectives of this research were to (1) examine the validity of ASVAB 8, 9, and 10 selector composites, including the AFQT, for predicting performance in a wide variety of Navy schools, and (2) identify and evaluate ASVAB 8, 9, and 10 composites that predict performance in specific schools better than the operational composites.

Method

The sample consisted of students assigned to 47 Navy "A" schools and 53 Basic Electricity and Electronics (BE/E) schools between October 1980 and October 1982. The predictor variables were the ASVAB tests, the AFQT, 12 ASVAB school selector composites, and 25 experimental composites. The criterion measures were final school grade (FSG) and time in training (TIME) for the correlation analyses, and final status code, which indicates whether the student was a graduate or an academic drop, for the expectancy analyses.

Pearson product-moment correlations between predictors and criteria were computed and corrected for restriction in range. For each school, the validity coefficients of the presently used and alternate composites were compared and the differences between them were tested for significance. Multiple correlations between ASVAB tests and the criterion were calculated for each school. Expectancy tables were constructed using final status code as the criterion for the 54 courses with sufficient data.

For the schools with a minimum of 25 students per subgroup, uncorrected and corrected correlations, regression slopes, intercepts, and standard errors of estimate were computed separately for sex and race subgroups. For schools with a minimum of 75 students per subgroup, a moderated multiple regression strategy was used to investigate the differences between the subgroup regression equations.

Results

For "A" schools using an FSG criterion, the median uncorrected and corrected validity coefficients of operational ASVAB school selector composites were .35 and .55 respectively. For "A" schools using a TIME criterion, the median uncorrected and corrected operational composite validity coefficients were -.27 and -.42 respectively; the corresponding values for BE/E schools, all of which use a TIME criterion, were -.36 and -.57. Similar results were obtained for the AFQT.

Inspection of the correlational and expectancy analysis results for the "A" schools and their prerequisite BE/E schools revealed a number of schools for which an alternate ASVAB composite appeared to predict training performance better than the current one. However, for most of these schools a change in selector composites was not warranted, for some of the following reasons: (1) The proposed change was not supported by validity data from the present study for related schools, (2) the proposed change was not supported by validity data from earlier studies for the same or related schools, (3) the proposed change would not be logically valid, given the content of the course and of the job, and (4) the composites found to be significantly more valid than the current composite are not presently used by the Navy, and there does not appear to be adequate justification for adding them. Two "A" schools, EM-6070 and QM-6001, and three BE/E schools, EM-6258, EM-6273, and EM-6303, were identified for which a change did, nevertheless, appear warranted.

Comparisons of the ASVAB school selector composite and AFQT validity coefficients for males and females did not reveal a systematic tendency for validity coefficients to be higher for either sex group; however, the moderated multiple regression analysis detected regression equation differences for the ASVAB school selector and AFQT for both schools analyzed (DP-6167 and MS-6125). For the race subgroup analyses, the validity of the ASVAB selector composite and the AFQT was higher for whites than for blacks in seven out of eight schools. For the MS-6125 school, no slope or intercept differences between the race subgroups were found for the ASVAB school selector composite; a small intercept difference was found for AFQT. For SH-6477, an intercept difference was found for the ASVAB selector composite; slope and intercept differences between blacks and whites were found for AFQT.

Conclusions

1. The operational ASVAB 8, 9, and 10 selector composite validity coefficients against an FSG criterion were somewhat lower than those previously reported for ASVAB 6 and 7 but were still in the range of acceptable validity.
2. The operational ASVAB selector composite validity coefficients against a TIME criterion were somewhat higher than those previously reported for ASVAB 6 and 7 but were lower than desired for many schools.
3. In two "A" schools (EM-6070 and QM-6001) and three BE/E schools (EM-6258, EM-6273, EM-6303), a change of selector composites would substantially improve prediction of performance.
4. Regression equation differences for the ASVAB school selector composite and the AFQT were found between male and female, and between black and white subgroups for both schools in the subgroup analyses. However, because the samples were small and represented only a very small fraction (2 out of 100 for sex and race respectively) of the

schools in the study, these findings should be regarded as tentative until further investigations of these issues have been made.

Recommendations

1. To improve prediction of performance in two "A" schools (EM-6070, QM-6001) and three BE/E schools (EM-6258, EM-6273, EM-6303), the proposed ASVAB 8, 9, and 10 composites presented in Table 11 should be adopted.

2. Further research should be conducted to improve the ASVAB's differential prediction of performance across Navy technical schools.

3. Further research should be conducted to determine whether the use of the ASVAB school selector composites or the AFOT may result in differential prediction of performance for sex or race subgroups.



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INTRODUCTION

Background and Problem

The Armed Services Vocational Aptitude Battery (ASVAB) is the primary instrument used by the Navy in the selection and initial assignment of enlisted personnel to Navy ratings (jobs) and their associated technical schools. The operational version of the battery, Forms 8, 9, and 10, consists of 10 cognitive tests. A variety of composites, sums of certain ASVAB tests, are derived from the ASVAB. One of these, the Armed Forces Qualification Test (AFQT), is used to screen applicants for enlistment eligibility. Twelve other ASVAB composites are currently in use by the Navy to determine eligibility for specific Navy technical schools.

The ASVAB initially became the common military selection and classification instrument, replacing the Basic Test Battery (BTB), in January 1976, with the implementation of ASVAB Forms 6 and 7. In October 1980, Forms 8, 9, and 10 replaced Forms 6 and 7. Whereas the validity of the BTB and ASVAB Forms 6 and 7 have been studied extensively (Alf, Gordon, Rimland, & Swanson, 1962; Thomas & Thomas, 1967; Thomas, 1970; Swanson 1979), and the validity of ASVAB 8, 9, and 10 has been studied for a few Navy schools (e.g., Booth-Kewley, 1984), ASVAB 8, 9, and 10 has not yet been the subject of a large-scale validation effort that involves a wide variety of Navy technical schools.

It is important that the validity of operational ASVAB selector composites (including AFQT) for predicting performance in Navy technical schools be evaluated periodically to ensure effective selection and classification of Navy enlisted personnel. While the criterion of ultimate concern may be performance on the job, rather than in job training courses, the ASVAB is typically validated against measures of training performance such as final course grade, time in training, or a pass/fail (attrition) criterion. There are many reasons for this approach, the most important that adequate measures of Navy job performance are simply not available (although they are currently under development). Also, performance in training provides evidence of a person's ability and desire to learn and perform necessary job skills; this ability and desire could be expected to predict later job success. Finally, validation of selectors against final grades helps to ensure that only persons with a high probability of mastering course material are selected; validation against either time in training or attrition helps to reduce training costs.

Although the AFQT is used only for selection into the Navy, not for classification of personnel into technical schools, it is regarded as a measure of general mental ability and would thus be expected to predict school performance. Confirmation of this expectation requires that AFQT be included in this validation of ASVAB 8, 9, and 10.

In addition to determining the validity of ASVAB selector composites and of the AFQT against school performance for Navy enlisted personnel generally, professional standards for the development and use of tests (American Psychological Association, 1974) require that criterion-related validity also be examined for sex and race subgroups, where sufficient data are available. This study should be done to determine whether the use of operational ASVAB selector composites results in differential prediction of performance.

Objectives

The objectives of this research were to (1) examine the validity of ASVAB 8, 9, 10 selector composites, including the AFQT, for predicting performance in a wide variety of

Navy schools, and (2) identify and evaluate ASVAB 8, 9, 10 composites that predict performance in specific schools better than do the operational composites.

METHOD

Samples

The samples consisted of students assigned to 47 Navy Class "A" schools and 53 Basic Electricity and Electronics (BE/E) schools. All schools having both predictor and criterion data for 50 or more students were included in the study. The time period covered was from October 1980 to October 1982. The schools included in the validation, along with sample sizes, are shown in Tables 1 and 2.

Variables

Criteria

Final school grade (FSG) was used as the primary criterion of school performance for the 35 schools assigning such a grade. The remaining 65 schools, 12 of the "A" schools and all 53 of the BE/E schools, use a self-paced mode of instruction, in which a student must demonstrate mastery of each course module before proceeding to the next. For these courses, the number of hours required to complete the course (TIME) was used as the primary criterion of school performance. Final status code, which indicates whether the student was a graduate or an academic drop, was available for all schools and was used as a criterion measure in expectancy analyses for the 54 courses having a sufficient number of academic drops. (Because the ASVAB was not designed to predict attrition due to nonacademic factors, nonacademic drops were not included in the expectancy analyses.)

Predictors

The predictors used in the study were derived from ASVAB 8, 9, 10, which had been administered to the subjects at the time of their enlistment. The primary predictor variables, which are shown in Table 3, were the scores obtained on the 10 cognitive tests and the verbal score of ASVAB, the 12 school selector composites currently used by the Navy, and the AFQT. (The AFQT score is obtained by summing the raw scores on the arithmetic reasoning, word knowledge, and paragraph comprehension tests plus one-half the score on the numerical operations test, and converting the total to a percentile score.)

Twenty-five additional ASVAB composites (see Table 3) were included in the analyses in an attempt to identify composites that might be more valid than existing ones. Ten of these composites are currently in use by the Army, Marine Corps, or the Air Force. The remaining 15 composites were experimental, and were selected on a rational basis after examining occupational information on job duties as well as validity data from past studies of ASVAB (e.g., Swanson, 1979).

Procedure

Final school grades (FSG) were obtained directly from the schools. Criterion data in the form of time required to complete the course (TIME) were extracted from data tapes obtained from the Chief of Naval Technical Training. ASVAB test scores, AFQT scores, final status, sex, and race codes were extracted from data tapes provided by the Chief of Naval Education and Training.

Table 1

"A" Schools Included in Validation Analysis

Course Code	School/Course Rating	Subjects in Correlational Analyses	Subjects in Expectancy Analyses		
		Total N	Grad N	Drop N	Total N
Courses With a Final School Grade (FSG) Criterion					
6527	Aviation Boatswain's Mate, Aircraft Handling (ABH)	69	--	--	--
6512	Aviation Boatswain's Mate, Fuels (ABF)	96	--	--	--
6513	Aviation Boatswain's Mate, Launch & Recovery Equipment (ABE)	72	--	--	--
6286	Builder (BU)	203	--	--	--
6289	Construction Electrician (CE)	126	--	--	--
6291	Construction Mechanic (CM)	79	--	--	--
6020	Cryptologic Technician, Administrative (CTA)	107	129	9	138
6301	Cryptologic Technician, Collection (CTR)	140	174	42	216
6320	Cryptologic Technician, Technical (CTT)	63	--	--	--
6302	Cryptologic Technician Technical (CTT)	259	311	83	394
6167	Data Processing Technician (DP)	373	--	--	--
6131	Data Systems Technician (DS)	118	--	--	--
6070	Electrician's Mate (EM)	369	549	52	601
6292	Equipment Operator (EO)	181	--	--	--
6376	Fire Control Technician, Gun (FTG)	117	--	--	--
6377	Fire Control Technician, Gun (FTG)	245	--	--	--
6027	Fire Control Technician, Missile (FTM)	172	--	--	--
6108	Fire Control Technician, Missile (FTM)	134	204	10	214
8563	Gas Turbine Fundamental Electrical (GSE/GSM)	117	--	--	--
8564	Gas Turbine Technician (GSM)	84	--	--	--
6025	Gunner's Mate Technician (GMT)	99	124	7	131
6106	Hull Maintenance Technician (HT)	53	--	--	--
6119	Hull Maintenance Technician (HT)	390	--	--	--
6120	Hull Maintenance Technician (HT)	297	--	--	--
6068	Machinery Repairman (MR)	194	308	45	353
6125	Mess Management Specialist (MS)	1518	--	--	--
6001	Quartermaster (QM)	473	694	34	726
6477	Ship's Serviceman (SH)	595	--	--	--
6005	Signalman (SM)	377	--	--	--
6288	Steelworker (SW)	85	--	--	--

Table 1 (Continued)

Course Code	School/Course Rating	Subjects in Correlational Analyses	Subjects in Expectancy Analyses		
		Total N	Grad N	Drop N	Total N
Courses With a Final School Grade (FSG) Criterion (Continued)					
6146	Strategic Weapons System Electronics (SWS)	187	246	83	329
6034	Torpedoman's Mate, Submarine Operator (TMS)	82	--	--	--
6036	Torpedoman's Mate, Surface Operator (TM)	219	--	--	--
6093	Torpedoman's Mate (TMT)	202	--	--	--
6290	Utilitiesman (UT)	77	--	--	--
Courses With a Contact Time (TIME) Criterion					
6124	Aviation Antisubmarine Warfare Technician (AX)	288	189	9	198
6239	Aviation Electronics Technician (AT)	1489	1066	58	1124
6240	Aviation Fire Control Technician (AQ)	475	355	27	382
6501	Aviation Machinist's Mate (AD)	880	564	37	601
6486	Boiler Technician (BT)	2085	--	--	--
602D	Electronic Warfare Technician (EW)	408	--	--	--
602A	Electronic Warfare Technician (EW)	400	--	--	--
6487	Engineman (EN)	1258	--	--	--
605Z	Interior Communications Electrician (IC)	658	--	--	--
6492	Machinist's Mate (MM)	2598	--	--	--
606D	Radioman (RM)	302	--	--	--
6242	Tradesman (TD)	303	--	--	--

Table 2

BE/E Schools Included in Validation Analysis

Course Code	School/Course Rating	Subjects in	Subjects in		
		Correlational Analyses Total N	Grad N	Drop N	Expectancy Analyses Total N
6232	Aviation Antisubmarine Warfare Technician (AX)	449	449	21	470
6235	Aviation Electrician's Mate (AE)	1606	1606	195	1801
6230	Aviation Electronics Technician (AT)	2245	2245	101	2346
6231	Aviation Fire Control Technician (AQ)	794	794	60	854
6237	Aviation Support Equipment Technician (ASE)	120	120	19	139
6259	Construction Electrician (CE)	65	--	--	--
6270	Construction Electrician (CE)	148	148	25	173
6307	Construction Electrician (CE)	291	291	30	321
6308	Cryptologic Technician Maintenance (CTM)	275	275	24	299
6269	Data Systems Technician (DS)	226	226	22	248
6309	Data Systems Technician (DS)	129	--	--	--
6366	Data Systems Technician (DS)	151	--	--	--
605R	Electrician's Mate, Nuclear Field (EM)	592	592	14	606
605U	Electrician's Mate, Nuclear Field (EM)	1109	--	--	--
605V	Electrician's Mate, Nuclear Field (EM)	272	--	--	--
6258	Electrician's Mate (EM)	490	490	91	581
6273	Electrician's Mate (EM)	269	269	82	351
6303	Electrician's Mate (EM)	164	164	52	216
6256	Electronics Technician (ET)	637	637	33	670
6271	Electronics Technician (ET)	412	--	--	--
6304	Electronics Technician (ET)	364	--	--	--
6403	Electronics Technician , Advanced Electronics Field (ET)	958	958	100	1058
6409	Electronics Technician , Advanced Electronics Field (ET)	511	511	111	622
6414	Electronics Technician , Advanced Electronics Field (ET)	928	928	142	1070
6254	Electronic Warfare Technician (EW)	68	68	9	77
6275	Electronic Warfare Technician (EW)	166	166	17	183
6306	Electronic Warfare Technician (EW)	550	550	50	600
6248	Fire Control Technician, Gun (FTG)	415	415	58	473
6310	Fire Control Technician, Gun (FTG)	221	221	19	240
6359	Fire Control Technician, Gun (FTG)	220	220	26	246
6404	Fire Control Technician, Gun Submarine (FTG)	57	--	--	--
6413	Fire Control Technician, Gun (FTG)	159	159	7	166

Note. Contact time (TIME) was the criterion of school performance for all BE/E schools.

Table 2 (Continued)

Course Code	School/Course Rating	Subjects in	Subjects in		
		Correlational Analyses	Expectancy Analyses		
		Total N	Grad N	Drop N	Total N
6249	Fire Control Technician, Missile (FTM)	284	284	28	312
6311	Fire Control Technician, Missile (FTM)	140	140	16	156
6358	Fire Control Technician, Missile (FTM)	166	166	19	185
6372	Gas Turbine Technician, Electrical (GSE)	57	--	--	--
6370	Gunner's Mate, Gun (GMG)	369	369	44	413
6368	Gunner's Mate, Missile (GMM)	264	264	21	285
6369	Gunner's Mate, Technician (GMT)	224	224	28	252
6274	Interior Communications (IC)	600	600	249	849
6315	Interior Communications (IC)	66	66	17	83
6367	Interior Communications (IC)	89	89	29	118
606G	Mineman (MN)	58	58	22	80
606J	Radioman, Submarine (RM)	156	156	7	163
606K	Radioman, Submarine (RM)	58	--	--	--
6352	Radioman, Submarine (RM)	162	162	11	173
606M	Sonar Technician, Submarine (STS)	66	--	--	--
606N	Sonar Technician, Submarine (STS)	322	322	25	347
6277	Sonar Technician, Submarine (STS)	112	112	7	119
6276	Sonar Technician, Submarine (STS)	149	149	7	156
6318	Torpedoman's Mate, Technician (TMT)	256	256	36	292
6551	Torpedoman's Mate, Technician (TMT)	101	101	14	115
6233	Tradevman (TD)	430	430	25	455

Table 3
 Predictor Variables From ASVAB Forms 8, 9, and 10

Predictor Variable	Abbreviation	Description
ASVAB Tests^a		
General Science	GS	A 25-item test of knowledge of the physical (13 items) and biological (12 items) sciences--11 minutes.
Arithmetic Reasoning	AR	A 30-item test of ability to solve arithmetic word problems--36 minutes.
Word Knowledge	WK	A 35-item test of knowledge of vocabulary, using words embedded in sentences (11 items) and synonyms (24 items)--11 minutes.
Paragraph Comprehension	PC	A 15-item test of reading comprehension--13 minutes.
Numerical Operations	NO	A 50-item speeded test of ability to add, subtract, multiply, and divide one- and two-digit numbers--3 minutes.
Coding Speed	CS	An 84-item speeded test of ability to recognize numbers associated with words from a table--7 minutes.
Auto and Shop Information	AS	A 25-item test of knowledge of automobiles, shop practices, and use of tools--11 minutes.
Mathematics Knowledge	MK	A 25-item test of knowledge of algebra, geometry, fractions, decimals, and exponents--24 minutes.
Mechanical Comprehension	MC	A 25-item test of knowledge of mechanical and physical principles--19 minutes.
Electronics Information	EI	A 20-item test of knowledge of electronics, radio, and electrical principles and information--9 minutes.
Verbal	VE	A composite consisting of WK + PC.

^aReported as Navy Standard Scores having a mean of about 50 and a standard deviation of 10 for an unrestricted recruit population.

Table 3 (Continued)

Predictor Variable	Abbreviation	Description
<u>ASVAB Selector Composites Used by Military Services</u>		
<u>All Services</u>		
AR+NO/2+VE	AFQT	Armed Forces Qualification Test.
VE+AR	GT	General technical.
AR+MK+EI+GS	ELEC	Electronics.
VE+NO+CS	CLER/A	Clerical. Used as administrative composite (A) by Air Force.
<u>Navy</u>		
VE+MC+AS	MECH	Mechanical.
VE+MC	AM	Selector for Aviation Structural Mechanical School.
AR+2MK+GS	BE/B ^b	Selector for Basic Electricity and Electronics School.
MK+AS	BT/EN/MM	Selector for Boiler Technician, Engineer, and Machinist's Mate Schools.
VE+AR+NO+CS	CT	Selector for Communications Technician (Interpreter) School.
VE+MK+GS	HM	Selector for Hospitalman School.
AR+MC+AS	MR	Selector for Machinery Repairman School.
VE+AR+MC	SUB	Selector for Submarine School.
MK+EI+GS	ELEC Comp ^c	Component of electronics composite.
<u>Air Force</u>		
MC+GS+AS	M	Mechanical.
<u>Army</u>		
CS+AR+MC+AS	CO	Combat.
CS+AR+MC+MK	FA	Field artillery.
NO+VE+MC+AS	OF	Operators and food.
NO+CS+VE+AS	SC	Surveillance and communications.
MK+EI+GS+AS	GM	General maintenance.
NO+EI+MC+AS	MM	Mechanical maintenance.
VE+MK+MC+GS	ST	Skilled technician.
<u>Marine Corps</u>		
NO+VE+AS	CO	Combat.
AR+VE+AS	FA	Field artillery.
MK+EI+GS+AS	GM	General maintenance.

^bNot all BE/E schools use the "BE/E" composite as the operational selector, nor is it used only by BE/E schools--a number of "A" schools use it as well.

^cMost of the Navy schools that use the electronics composite use the following dual cutoffs: MK + EI + GS = 156 + AR = 218. MK + EI + GS is never used by itself as a school selector.

Table 3 (Continued)

Predictor Variable	Abbreviation	Description
Experimental ASVAB Composites		
WK+AR	AR+EI+MC	
WK+MC+AS	VE+MK	
WK+NO+CS	MK+EI	
AR+MC	MK+MC+EI	
CS+VE+AR	AR+MK	
MK+EI+AS	AR+EI+GS	
AR+MK+MC	AR+MK+AS	
	MC+MK+AS	

Data Analyses

Total School Samples

For each of the 100 schools, means, standard deviations, and product-moment correlations were computed for all of the ASVAB predictors (tests, existing composites, and experimental composites). Considerable restriction was evident in the samples because school assignment was contingent on achieving minimum scores on certain sets of ASVAB tests. Therefore, the validity coefficient of each predictor was corrected for restriction in range to reflect the value that would be obtained for a sample representing the full range of ability of Navy recruits, using formulas from Thorndike (1949, pp. 173-174) for direct and indirect restriction, as appropriate. The population statistics used for the corrections were based on a group of 66,459 regular Navy recruits who entered the Navy from July 1981 through May 1982. For this population, means, standard deviations, and intercorrelations for the ASVAB tests and Navy composites are shown in Table 4.

For each school, the uncorrected (r_u) and corrected (r_c) validity coefficients of the current Navy composites and the alternate composites were compared with the validity coefficient of the operational school selector composite. Whenever another composite appeared more predictive than the operational composite, the differences between the uncorrected coefficients were tested for significance (Johnson 1949, p. 87). For schools that use multiple selector composites, the alternate composites were compared with the most predictive operational composites.

Multiple correlations (R_s) between ASVAB test scores¹ and the criterion for each school were calculated using a standard stepwise regression procedure (forward inclusion). In this procedure, the order of inclusion of subtest predictors is determined by the contribution of each predictor to the variance accounted for each step.

¹The VE score, which is the sum of word knowledge (WK) and paragraph comprehension (PC) scores, was used instead of WK and PC scores separately in the multiple regression analysis.

Table 4

Means, Standard Deviations, and Correlations Among ASVAB 8, 9, and 10
Tests and Navy Composites for a Full-Range Recruit Sample
(N = 66,459)

Test	Correlation											Mean	SD	
	1	2	3	4	5	6	7	8	9	10	11			
ASVAB Tests														
1 GS	100	50	68	53	07	11	51	50	56	60	69	51.91	7.90	
2 AR	50	100	46	46	32	27	37	70	52	43	50	53.62	7.86	
3 WK	68	46	100	61	08	16	38	45	43	49	96	52.54	6.73	
4 PC	53	46	61	100	14	20	32	43	39	39	80	53.31	6.49	
5 NO	07	32	08	14	100	53	-04	35	05	01	11	53.26	7.31	
6 CS	11	27	16	20	53	100	01	31	10	06	19	53.09	7.90	
7 AS	51	37	38	32	-04	01	100	29	63	64	40	51.25	8.67	
8 MK	50	70	45	43	35	31	29	100	49	41	48	52.54	8.80	
9 MC	56	52	43	39	05	10	63	49	100	61	45	51.24	8.27	
10 EI	60	43	49	39	01	06	64	41	61	100	50	51.45	8.05	
11 VE	69	50	96	80	11	19	40	48	45	50	100	52.88	6.37	
ASVAB Navy Selector Composites														
Test	Correlation												Mean	SD
	1	2	3	4	5	6	7	8	9	10	11	12		
1 GT	100	72	87	59	80	86	71	79	87	76	93	78	106.50	12.35
2 MECH	72	100	77	36	93	65	85	49	75	93	88	78	155.38	19.11
3 ELEC	87	77	100	50	80	95	87	69	93	83	89	97	209.54	26.16
4 CLER	59	36	50	100	45	55	41	94	56	36	52	46	159.22	15.67
5 AM	80	93	80	45	100	71	74	57	82	94	86	80	104.12	12.53
6 BE/E	86	65	95	55	71	100	85	73	93	74	85	90	210.62	28.84
7 BT/EN/MM	71	85	87	41	74	85	100	57	80	88	79	86	103.80	14.00
8 CT	79	49	69	94	57	73	57	100	69	56	71	61	212.84	20.68
9 HM	87	75	93	56	82	93	80	69	100	71	86	93	157.33	19.36
10 MR	76	93	83	36	94	74	88	56	71	100	91	78	156.08	20.43
11 SUB	93	88	89	52	86	85	79	71	86	91	100	83	157.74	18.36
12 ELEC Comp	78	78	97	46	80	90	86	61	93	78	83	100	155.91	20.21

Note. Decimal points have been omitted. Coefficients are Pearson product-moment correlations.

Regression slopes, intercepts, and standard errors of estimate were calculated for operational ASVAB school selector composites and for the AFQT for all school samples. Using final status code as the criterion, expectancy tables were constructed for the 54 courses (13 "A" schools and 41 BE/E schools) with sufficient data. The population values used for these tables were based on the sample of 66,459 recruits that was used for correcting validity coefficients for range restriction.

Sex and Race Subgroups

To identify any tendencies for predictive validity to vary by sex or race, several statistics were calculated. For the schools with at least 25 students per sex or race subgroup, the means, standard deviations, and uncorrected and corrected correlations of the operational ASVAB school selector composite and the AFQT were computed, as well as criterion means and standard deviations. In addition, for the school selector composite and for the AFQT, regression slopes, intercepts, and standard errors of estimate were calculated separated for sex and race subgroups.

For schools with at least 75 students per subgroup, a moderate multiple regression strategy (Bartlett, Bobko, Mosier, & Hannan, 1978) was used to investigate the differences between the subgroup regression equations. More specifically, these analyses were performed to identify any significant differences in regression slopes and intercepts for ASVAB school selector composites and AFQT. If such differences exist, separate regression equations would be required to represent the relationship between the ASVAB composite, or AFQT, and the school performance criterion for these subgroups. The multiple regression analyses were performed with the ASVAB measure (the school selector composite or AFQT), sex or race (coded as a dummy variable), and the interaction of the ASVAB measure and sex or race entered into the equation, in that order, as predictors.

RESULTS

Total School Samples

Bivariate and multiple correlations of the primary predictors (ASVAB tests and Navy composites) with school performance are shown in Appendix A, where the schools are grouped by operational composite. Appendix B shows the correlations between operational ASVAB selector composites and the most valid alternate composites for each school; the ASVAB composites found to be significantly more predictive than the school's current composite are indicated with asterisks. The correlations between all predictor variables and school performance criteria (Appendix C) and expectancy tables (Appendix D) were also calculated for each of the 100 schools used in the study.²

Validity of ASVAB School Selector Composites

Correlational Analyses. Median validity coefficients of the operational Navy ASVAB composites for "A" schools in which they are used are presented in Table 5. As indicated, the median uncorrected coefficients for "A" schools using an FSG criterion ranged from .23 for the mechanical composite to .48 for the MR selector; the corrected coefficients ranged from .37 for the mechanical and clerical composites to .68 for the BT/EN/MM selector. The overall median coefficients were .35 (r_u) and .55 (r_c).

²Appendices C and D have been printed separately in a Supplement to this report and are available from the Navy Personnel Research and Development Center, Code 62.

Table 5

Median Correlations Between School Performance Criteria
and ASVAB Selector Composites Used by "A" Schools

Composite	Description	Median Correlations					
		FSG			TIME		
		r_u	r_c	N^a	r_u	r_c	N^a
VE+AR	General technical (GT) composite	42	54	11	---	---	0
VE+MC+AS	Mechanical (MECH) composite	23	37	9	---	---	0
AR+MK+EI+GS	Electronics (ELEC) composite	41	67	8	-25	-42	8
VE+NO+CS	Clerical (CLER) composite	23	37	1	-35	-49	1
AR+2MK+GS	BE/E selector	27	44	5	-32	-47	1
MK+AS	BT/EN/MM selector	41	68	2	-28	-39	3
AR+MC+AS	MR selector	48	67	1	---	---	0
VE+AR+MC	SUB selector	38	56	1	-19	-47	1
All composites		35	55	38	-27	-42	14

Note. Decimal points have been omitted from correlation coefficients.

^aThe number of schools in the table differs from the number of schools in the study because some schools use more than one selector composite.

The median uncorrected coefficients for "A" schools with a TIME criterion (see Table 5) ranged from -.19 for the SUB selector to -.35 for the clerical composite, and the median corrected validity coefficients ranged from -.39 for the BT/EN/MM selector to -.49 for the clerical composite. (A negative value was expected for the TIME criterion because less time was expected for high-ability students.) The overall median coefficients were -.27 (r_u) and -.42 (r_c).

For BE/E schools, the median correlations between the Navy composites and TIME were substantially higher than those obtained for the "A" schools that use a TIME criterion. As shown in Table 6, the median uncorrected coefficients ranged from -.19 for the general technical composite to -.40 for the BE/E selector; the corrected coefficients ranged from -.38 for the mechanical composite to -.65 for the BT/EN/MM selector. The overall median coefficients were -.36 (r_u) and -.57 (r_c).

Table 6
Median Correlations Between TIME and ASVAB Selector
Composites Used by BE/E Schools

Composite	Description	Median Correlations TIME		
		r_u	r_c	N ^a
VE+AR	General Technical (GT) composite	-19	-51	6
VE+MC+AS	Mechanical (MECH) composite	-20	-38	1
AR+MK+EI+GS	Electronics (ELEC) composite	-38	-61	36
VE+NO+CS	Clerical (CLER) composite	-26	-40	3
AR+2MK+GS	BE/E selector	-40	-59	13
MK+AS	BT/EN/MM selector	-39	-65	1
VE+AR+MC	SUB selector	-27	-57	8
All composites		-36	-57	68

Note. Decimal points have been omitted from correlation coefficients.

^aThe number of schools in the table differs from the number of schools in the study because some schools use more than one selector composite.

For most of the schools used in the study, a number of alternate composites, either Navy or experimental, predicted performance better than the current selector composite. For 39 out of the 100 schools studied, one or more alternate ASVAB composites predicted FSG or TIME significantly better than the operational composite ($p < .05$). More specifically, alternate composites were significantly better predictors than the operational school selectors in 11 of the 35 "A" schools with an FSG criterion, 9 of the 12 "A" schools with a TIME criterion, and 19 of the 53 BE/E schools, all of which use a TIME criterion.

For each of the 80 schools that had a sample of 100 or more, the uncorrected validity coefficients of the operational composites were compared with multiple correlations (R_s) computed using the same number of ASVAB tests as contained by the operational composite (see Appendix A). For every school studied, the multiple correlation was higher than the operational composite validity coefficient. The mean and median differences between the multiple correlation and the uncorrected operational composite validity coefficient were .08 and .07 correlation points for "A" schools with an FSG criterion, .09 and .09 points for "A" schools with a TIME criterion, and .12 and .11 points for BE/E schools with a TIME criterion.

For the "A" schools with an FSG criterion, the intercepts, slopes, and standard errors of estimate varied substantially across schools, even among those courses using the same selector composite (see Table 7). Although the "A" schools with a TIME criterion showed similar variation, the intercepts, slopes and standard errors of estimate for these courses

are not directly comparable because the TIME criterion is not measured on a common metric across schools. Similarly, because all the BE/E schools in the study use the TIME criterion, the intercepts, slopes, and standard errors of estimate presented for these schools in Table 8 should not be directly compared.

Expectancy Analyses. Expectancy tables were constructed for the current school selector composite for each of the 54 schools having sufficient data. For 24 of these schools (5 "A" schools and 19 BE/E schools), one or more alternate ASVAB composites had been found in the correlation analyses to be significantly more valid than the operational one. Expectancy tables for the most promising alternate composites were prepared for these 24 schools (see Appendix C).

In each expectancy table, data are presented for the current cutting score, or the corresponding cutting score for an alternate composite, as well as for several cutting scores above and below it. The tables show the number of recruits, per 1000, who would qualify for the school, and the number of graduates and academic drops expected for each cutting score listed. The expectancy analyses results present the practical impact of using the proposed alternate selector in terms of school enrollment and academic attrition. This information, where available, supplements the validity information yielded by the correlational analyses.

The results of the expectancy analyses showed that in three "A" schools (EM-6070, AX-6241, and AQ-6240), use of the proposed alternate composite (AR + MK + EI + GS for EM and VE + AR + NO + CS for AX and AQ) with a cutting score comparable to the current one would yield more graduates and fewer drops than does the operational selector. For QM-6001 "A" school, use of the proposed composite (AR + 2MK + GS) would result in the same or slightly more graduates, and half as many drops. For AT-6239, use of the proposed selector composite (VE + AR + NO + CS) would yield more graduates and the same or slightly more drops as occur presently.

Effectiveness of Alternate Composites. On the basis of the correlational and expectancy results reported here, it appeared that alternate ASVAB composites would be more effective than the operational ones for the EM, AX, AQ, AT, and QM "A" schools. There is, however, a prerequisite BE/E school for four of these schools (not for QM), and the same selector composite is used for both BE/E and "A" schools within a rating. Therefore, the correlational and expectancy analyses results for the appropriate BE/E schools were inspected to determine whether they supported use of the proposed alternate composite.

Analysis of correlational data, which were available for all three EM BE/E schools (6258, 6273, and 6303), revealed that adoption of the proposed alternate composite (AR + MK + EI + GS) would not change the predictiveness of school performance appreciably. The results indicated that for EM-6258, a change to the proposed alternate composite (AR + MK + EI + GS) would result in a decrease of .04 and .02 in the uncorrected and corrected validity coefficients, respectively. For EM-6273 BE/E school, there would be a decrease of .01 in the uncorrected and no change in the corrected validity coefficient, and for EM-6303, there would be an increase of .02 in the uncorrected and no change in the corrected validity coefficient. The expectancy analyses for these BE/E schools showed that using the proposed composite (with a cutting score of 200) would result in 23 more graduates and 3 fewer drops per 1000 for 6258, 28 more graduates and 8 fewer drops for 6273, and 46 more graduates and 26 fewer drops for 6303 than would be expected with the current school selector composite.

Table 7

Correlation Coefficients, Intercepts, Slopes, and Standard Errors of Estimate of Current ASVAB Selector Composites for "A" Schools

Rating Code	Course Code	Selector Composite	N	r_u	r_c	Intercept	Slope	Standard Error of Estimate
Courses With FSG Criterion								
ABE	6513	VE+AR	72	.41	.56	50.97	.31	5.76
ABF	6512	VE+AR	96	.38	.50	48.60	.30	6.40
ABH	6527	VE+AR	69	.42	.54	47.09	.31	6.08
CTR	6301	VE+AR	140	.50	.59	66.13	.24	4.07
CTT	6302	VE+AR	259	.60	.68	55.06	.32	4.29
CTT	6320	VE+AR	63	.44	.53	71.25	.19	3.76
DP	6167	VE+AR	373	.23	.39	83.00	.11	3.36
MS	6125	VE+AR	1581	.47	.57	58.62	.27	4.82
QM	6001	VE+AR	473	.47	.54	54.10	.34	6.59
SH	6477	VE+AR	595	.19	.32	75.33	.13	4.78
SM	6005	VE+AR	377	.32	.50	64.02	.25	5.28
BU	6286	VE+MC+AS	203	.43	.67	60.36	.16	3.41
CM	6291	VE+MC+AS	79	.23	.37	75.69	.06	3.04
EO	6292	VE+MC+AS	181	.22	.36	75.76	.07	3.64
GMT	6025	VE+MC+AS	99	.48	.71	66.78	.14	2.67
HT	6106	VE+MC+AS	53	.13	.25	84.54	.03	2.99
HT	6119	VE+MC+AS	390	.34	.59	68.59	.11	2.99
HT	6120	VE+MC+AS	297	.30	.54	73.15	.09	2.91
SW	6288	VE+MC+AS	85	.20	.31	73.40	.07	4.03
UT	6290	VE+MC+AS	77	.15	.23	73.54	.06	4.97
DS	6131	AR+MK+EI+GS	118	.32	.57	51.96	.13	4.99
FTG	6376	AR+MK+EI+GS	117	.45	.72	34.88	.20	5.14
FTG	6377	AR+MK+EI+GS	245	.32	.57	51.83	.13	4.88
FTM	6027	AR+MK+EI+GS	172	.52	.80	21.95	.26	5.11
FTM	6108	AR+MK+EI+GS	134	.42	.68	40.84	.18	5.08
SWS	6146	AR+MK+EI+GS	187	.41	.13	51.00	.67	3.86
CTA	6020	VE+NO+CS	107	.23	.37	76.51	.11	4.40
CE	6289	AR+2MK+GS	126	.24	.37	71.01	.07	4.79
EM	6070	AR+2MK+GS	369	.35	.44	54.83	.10	5.93
TM	6036	AR+2MK+GS	219	.35	.47	65.70	.10	5.28
TMT	6093	AR+2MK+GS	202	.25	.39	71.01	.07	4.79
MR	6068	AR+MC+AS	194	.48	.67	40.80	.24	5.40
GSE/	8563	AR+MK+EI+GS	117	.46	.77	32.90	.23	5.27
GSM		MK+AS	117	.47	.74	41.76	.37	5.24
GSM	8564	AR+MK+EI+GS	84	.36	.63	52.82	.15	4.75
		MK+AS	84	.35	.62	55.87	.27	4.73
TMS	6034	AR+2MK+GS	82	.27	.49	75.37	.06	4.55
		VE+AR+MC	82	.38	.56	62.17	.16	4.33
		VE	82	.20	.41	76.67	.20	4.59

Table 7 (Continued)

Rating Code	Course Code	Selector Composite	N	r_u	r_c	Intercept	Slope	Standard Error of Estimate
Courses With TIME Criterion								
AD	6501	AR+MK+EI+GS	880	-.35	-.50	350.75	-.92	37.96
AQ	6240	AR+MK+EI+GS	475	-.26	-.43	887.54	-1.70	92.72
AT	6239	AR+MK+EI+GS	1489	-.24	-.38	820.56	-1.45	93.58
AX	6241	AR+MK+EI+GS	288	-.28	-.45	881.92	-1.71	89.58
EW	602A	AR+MK+EI+GS	400	-.20	-.39	102.26	-.20	12.13
EW	602D	AR+MK+EI+GS	408	-.21	-.41	178.36	-.35	20.43
TD	6242	AR+MK+EI+GS	303	-.23	-.37	542.63	-.92	60.24
IC	605Z	AR+2MK+GS	658	-.32	-.47	383.13	-.77	41.67
BT	6486	MK+AS	2085	-.32	-.39	455.66	-1.86	62.39
EN	6487	MK+AS	1258	-.28	-.39	163.71	-.59	19.50
MM	6492	MK+AS	2598	-.25	-.33	394.41	-1.53	61.05
RM	606D	AR+MK+EI+GS	302	-.27	-.52	534.17	-1.52	65.76
		VE+NO+CS	302	-.35	-.49	566.22	-2.28	64.11
		VE+AR+MC	302	-.19	-.47	395.58	-1.25	67.17
		VE	302	-.09	-.36	269.43	-1.58	68.11

Table 8

Correlation Coefficients, Intercepts, Slopes, and Standard Errors of Estimate of Current ASVAB Selector Composites for BE/E Schools

Rating Code	Course Code	Selector Composite	N	r_u	r_c	Intercept	Slope	Standard Error of Estimate
MN	606G	VE+MC+AS	58	-.20	-.58	318.94	-1.01	47.47
AQ	6231	AR+MK+EI+GS	794	-.47	-.71	555.75	-1.72	44.47
AX	6232	AR+MK+EI+GS	449	-.50	-.73	526.64	-1.61	39.16
AT	6230	AR+MK+EI+GS	2245	-.50	-.69	495.98	-1.49	41.03
CTM	6308	AR+MK+EI+GS	275	-.29	-.57	664.31	-1.72	64.77
DS	6269	AR+MK+EI+GS	226	-.43	-.69	1156.44	-3.36	93.06
DS	6309	AR+MK+EI+GS	129	-.29	-.51	697.16	-1.85	81.82
DS	6366	AR+MK+EI+GS	151	-.29	-.53	776.83	-1.96	83.50
ET	6403	AR+MK+EI+GS	958	-.36	-.64	933.15	-2.48	78.21
ET	6409	AR+MK+EI+GS	511	-.35	-.61	1236.64	-3.24	110.10
ET	6414	AR+MK+EI+GS	928	-.36	-.58	1068.59	-2.74	100.47
EW	6254	AR+MK+EI+GS	68	-.30	-.50	696.84	-1.66	76.27
EW	6275	AR+MK+EI+GS	166	-.47	-.77	1270.89	-3.85	93.82
EW	6306	AR+MK+EI+GS	550	-.41	-.67	834.39	-2.40	69.78
FTG	6248	AR+MK+EI+GS	415	-.41	-.62	914.59	-2.47	81.44
FTG	6310	AR+MK+EI+GS	221	-.36	-.60	691.20	-1.77	61.29
FTG	6359	AR+MK+EI+GS	220	-.38	-.66	1024.88	-2.82	84.68
FTM	6249	AR+MK+EI+GS	284	-.39	-.65	994.17	-2.80	86.20
FTM	6311	AR+MK+EI+GS	140	-.44	-.77	966.86	-2.90	63.34
FTM	6358	AR+MK+EI+GS	166	-.38	-.64	994.74	-2.73	85.18
GMG	6370	AR+MK+EI+GS	369	-.40	-.57	473.82	-1.44	53.65
GMM	6368	AR+MK+EI+GS	264	-.38	-.63	530.60	-1.69	54.61
GMT	6369	AR+MK+EI+GS	224	-.41	-.52	433.03	-1.25	53.35
STG	6276	AR+MK+EI+GS	149	-.20	-.42	732.21	-1.66	94.47
TD	6233	AR+MK+EI+GS	430	-.48	-.70	483.08	-1.44	38.80
TMT	6551	AR+MK+EI+GS	101	-.39	-.67	493.88	-1.41	54.22
AE	6235	AR+2M+GS	1606	-.40	-.56	415.61	-1.10	46.65
ASE	6237	AR+2MK+GS	120	-.49	-.63	423.99	-1.25	44.68
CE	6259	AR+2MK+GS	65	-.45	-.62	480.26	-1.48	54.44
CEM	6270	AR+2MK+GS	148	-.26	-.42	357.01	-.88	55.61
CE	6307	AR+2MK+GS	291	-.36	-.55	387.02	-1.12	49.33
EM	6258	AR+2MK+GS	490	-.39	-.55	651.74	-1.52	83.76
EM	6273	AR+2MK+GS	269	-.61	-.70	925.45	-2.64	77.29
EM	6303	AR+2MK+GS	164	-.27	-.46	521.97	-1.12	62.77
IC	6274	AR+2MK+GS	600	-.42	-.59	948.59	-2.38	94.65
IC	6315	AR+2MK+GS	66	-.48	-.67	692.54	-1.85	59.18
IC	6367	AR+2MK+GS	89	-.24	-.38	642.40	-1.29	91.31
TMT	6318	AR+2MK+GS	256	-.38	-.61	424.35	-1.19	45.05
EM	605R	VE+AR	592	-.11	-.29	444.70	-1.61	65.50
		VE+MC+AS	592	-.25	-.36	528.82	-1.61	63.73
		AR+MK+EI+GS	592	-.27	-.37	662.47	-1.67	63.37
EM	605L	VE+AR	1109	-.18	-.43	509.36	-2.32	60.54
		VE+MC+AS	1109	-.31	-.49	526.17	-1.73	58.42
		AR+MK+EI+GS	1109	-.34	-.50	683.09	-1.84	57.80

Table 8 (Continued)

Rating Code	Course Code	Selector Composite	N	r_u	r_c	Intercept	Slope	Standard Error of Estimate
EM	605V	VE+AR	272	-.26	-.58	618.38	-3.16	55.26
		VE+MC+AS	272	-.26	-.53	462.69	-1.34	55.26
		AR+MK+EI+GS	272	-.40	-.63	700.56	-1.90	52.44
ET	6256	VE+NO+CS	637	-.22	-.47	598.82	-1.55	81.03
		VE+MC+AS	637	-.29	-.53	755.02	-2.43	79.50
		AR+MK+EI+GS	637	-.34	-.57	1032.90	-2.78	77.97
ET	6271	VE+NO+CS	412	-.23	-.49	715.95	-2.01	95.11
		VE+MC+AS	412	-.33	-.56	933.29	-3.20	92.09
		AR+MK+EI+GS	412	-.34	-.57	1241.92	-3.43	92.03
ET	6304	VE+NO+CS	364	-.23	-.45	544.83	-1.49	68.85
		VE+MC+AS	364	-.24	-.51	573.11	-1.63	64.77
		AR+MK+EI+GS	364	-.27	-.55	870.52	-2.31	67.37
FTG	6404	AR+MK+EI+GS	57	-.25	-.47	502.41	-1.39	68.20
		VE+AR+MC	57	-.41	-.55	668.71	-2.85	64.43
		VE	57	-.12	-.33	293.20	-2.07	70.04
FTG	6413	AR+MK+EI+GS	159	-.17	-.38	562.45	-1.60	100.35
		VE+AR+MC	159	-.10	-.34	386.00	-1.10	101.26
		VE	159	-.00	-.24	187.60	.11	101.81
RM	6372	AR+MK+EI+GS	57	-.50	-.25	919.40	-2.71	69.43
		VE+NO+CS	57	-.41	-.59	767.89	-2.97	73.12
		MK+AS	57	-.39	-.65	691.25	-3.51	73.85
RM	606J	VE+NO+CS	156	-.33	-.42	533.57	-2.17	64.65
		VE+AR+MC	156	-.37	-.58	591.10	-2.44	63.47
		VE	156	-.17	-.42	337.42	-2.96	67.52
RM	606K	VE+NO+CS	58	-.02	-.00	128.01	.12	75.38
		VE+AR+MC	58	-.05	-.09	210.53	-.36	75.28
		VE	58	-.04	-.08	193.59	-.79	193.59
RM	6352	VE+NO+CS	162	-.26	-.40	445.31	-1.62	63.03
		VE+AR+MC	162	-.37	-.61	615.71	-2.54	60.48
		VE	162	-.11	-.43	290.18	-2.07	64.81
STS	606M	AR+MK+EI+GS	66	-.29	-.52	583.66	-1.40	59.75
		VE+AR+MC	66	-.23	-.48	494.94	-1.38	60.73
		VE	66	-.02	-.34	274.73	-.39	62.44
STS	606N	AR+MK+EI+GS	322	-.43	-.71	1024.98	-2.99	77.57
		VE+AR+MC	322	-.32	-.65	806.48	-2.83	81.54
		VE	322	-.15	-.47	495.20	-3.21	85.08
STS	6277	AR+MK+EI+GS	112	-.41	-.69	1116.01	-3.23	89.59
		VE+AR+MC	112	-.23	-.59	764.20	-2.36	95.76
		VE	112	-.08	-.43	472.95	-2.15	97.98

The correlational results for the AX-6232, AT-6230, and AQ-6231 BE/E schools showed that changing to the proposed alternate composite (VE + AR + NO + CS) would reduce predictiveness of school performance. For AX-6232, the change would result in a decrease of .11 in both the uncorrected and corrected validity coefficients. For AT-6230, there would be a decrease of .10 in both the uncorrected and corrected validity coefficients. For AQ-6231, there would be a decrease of .04 and .05 respectively in the uncorrected and corrected validity coefficients. Expectancy analyses of the VE + AR + NO + CS composite were not conducted for these three BE/E schools because the correlational data did not reveal it to be a promising alternate composite.

Overall, it appears that for the EM and QM schools, a change to the proposed ASVAB selector composite would improve prediction of training performance, but for the AX, AT, and AQ schools, use of the proposed ASVAB selector composite (VE + AR + NO + CS) would not improve prediction of performance.

Validity of AFQT

In general, the AFQT is moderately predictive of both FSG and TIME. For "A" schools using an FSG criterion, the median uncorrected and corrected AFQT validity coefficients were .31 and .52 respectively. For "A" schools using a TIME criterion, the median uncorrected and corrected validity coefficients were -.31 and -.44 respectively; the corresponding validity coefficients for BE/E schools, all of which use a TIME criterion, were -.32 and -.55 (see Appendix A).

Sex and Race Subgroups

Validity of ASVAB School Selector Composites

As shown in Table 9, of the eight schools for which validity and regression results were computed separately for males and females, in four schools the (uncorrected) correlation coefficient for the males was higher and in four the coefficient for the females was higher. The DP-6167 and MS-6125 "A" schools were the only schools having sufficient data (at least 75 males and females) to permit analyses of differences between sex subgroup regression equations, using the moderated multiple regression technique recommended in Bartlett et al. (1978). These analyses revealed that in both schools, the regression slopes, but not the intercepts, of the ASVAB school composite were significantly different for the two sex groups. For both schools, use of the male regression equation for prediction of FSG for females would result in overprediction of performance for the lower half of the ASVAB composite score range and underprediction for the upper half of the score range.

As further shown in Table 9, ASVAB composite validity and regression results were computed separately for blacks and whites for eight schools (a different combination of schools than was used for analyses of males and females). For all but one of these schools, the (uncorrected) validity coefficient for the white subgroup was higher than the validity coefficient obtained for the blacks.

Multiple regression analyses of race subgroup regression equations were performed for the MS-6125 and SH-6477 "A" schools. Analysis of the MS-6125 school sample revealed that neither the slopes nor the intercepts of the ASVAB school composite were significantly different for the two race subgroups. Multiple regression analysis of the SH-6477 schools revealed that the intercepts, but not the regression slopes, of the ASVAB composite were significantly different for the two race subgroups. Use of the white

Table 9
Validation Statistics by Subgroup in 16 "A" Schools for Current ASVAR Selector Composites

Rating Code	Course Code	Selector Composite	Sex	N	Selector Mean	Selector SD	Criterion Mean	Criterion SD	r _u	r _c	Intercept	Slope	Error ^a
Male and Female Subgroups													
CTR	6301	VE+AR	M	97	112.0	9.9	92.3	5.0	54	62	62.0	-.27	4.24
			F	43	110.3	9.6	93.2	3.8	44	53	74.0	.17	3.47
CTT	6302	VE+AR	M	185	110.7	10.0	90.7	5.5	62	70	53.0	-.34	4.79
			F	74	108.9	9.7	90.3	5.1	53	62	60.1	.28	4.34
DP	6167	VE+AR	M	214	117.3	6.4	96.5	3.3	98	15	91.8	.04	1.79
			F	159	116.0	7.2	96.3	3.6	38	58	73.9	-.19	1.47
MS	6125	VE+AR	M	1413	102.2	9.4	86.1	5.4	45	55	59.5	.26	4.82
			F	168	97.7	8.4	85.1	5.6	56	70	48.5	-.37	4.69
SH	6477	VE+AR	M	555	104.0	7.0	88.9	4.8	17	29	76.3	.12	4.80
			F	40	105.2	7.1	91.3	4.3	49	70	60.5	-.29	3.82
CTA	6020	VE+NO+GS	M	38	172.0	9.3	95.0	5.5	30	47	64.0	.18	5.35
			F	69	175.5	9.1	96.2	3.8	14	24	83.8	.06	3.78
TMT	6093	AR+2MK+GS	M	146	221.3	17.5	88.0	4.9	22	35	74.4	.06	4.87
			F	54	219.5	16.7	87.5	5.6	32	50	63.7	-.11	5.36
MR	6068	AR+MC+AS	M	168	171.7	12.2	82.1	6.0	47	66	42.3	-.23	5.36
			F	26	163.5	10.4	77.4	5.2	23	42	58.7	.12	5.13
White and Black Subgroups													
CTT	6302	VE+AR	W	210	111.3	10.2	90.9	5.3	64	71	53.3	-.34	4.11
			B	47	105.2	6.9	89.3	5.0	26	43	69.0	.19	4.91
DP	6167	VE+AR	W	328	117.0	6.9	96.5	3.5	22	37	83.5	-.11	3.42
			B	42	114.7	5.8	96.0	3.0	24	46	82.1	-.12	2.92
MS	6125	VE+AR	W	1202	103.3	9.5	86.5	5.4	47	57	59.2	.26	4.80
			B	306	96.1	6.5	84.1	5.2	26	46	63.7	-.21	5.04
QM	6001	VE+AR	W	409	110.1	10.1	82.8	7.4	46	54	45.5	.34	6.60
			B	49	101.0	7.4	77.7	6.0	17	28	63.5	-.14	5.93
SH	6477	VE+AR	W	416	105.1	7.4	88.8	5.0	23	37	72.0	.16	4.90
			B	147	101.5	5.5	89.6	4.4	05	11	55.7	-.04	4.37
SM	6005	VE+AR	W	342	111.4	7.4	91.4	5.6	33	50	63.4	-.25	5.27
			B	29	108.8	5.5	91.3	5.6	16	34	72.9	.17	5.65
EV	6070	AR+2MK+GS	W	269	224.1	20.9	76.8	6.2	55	46	53.9	.10	5.74
			B	53	207.7	19.8	75.1	5.1	32	44	58.0	.08	4.91
TV	6036	AR+2MK+GS	W	170	202.2	19.6	85.8	5.4	37	51	65.0	-.10	4.99
			B	42	193.8	19.2	83.5	6.4	20	29	70.7	.07	6.32

Note. Decimal points have been omitted from validity coefficients.
^aStandard error of estimate.

regression equation for prediction of FSG for blacks would result in underprediction for nearly the entire ASVAB composite score range.

Validity of AFQT

Of the eight schools for which AFQT validity and regression results were calculated separately for males and females, the (uncorrected) correlation coefficient for males was higher in four schools and the coefficient for females was higher in the other four (see Table 10). These results are the same as were obtained for the sex analyses of the ASVAB school composite, shown in Table 9.

Multiple regression analysis of the DP-6167 and the MS-6125 "A" schools indicated in both that the slopes, but not the intercepts, were significantly different for the sex subgroups. For both schools, use of the male AFQT regression equation for prediction of FSG for females would result in overprediction of the lower half and underprediction for the upper half of the AFQT score range. Again, these results are the same as those obtained for the multiple regression analyses of the ASVAB school selector by sex subgroup.

In eight schools, validity and regression results were calculated separately for race subgroups. As Table 10 shows, the AFQT validity coefficients for whites were higher than those obtained for blacks for all but one school. These findings are the same as for the race analyses of the ASVAB school composites (Table 9).

Multiple regression analysis of race subgroup differences on the AFQT for the MS-6125 school indicated that the intercepts, but not the slopes, were different for the race subgroups. Although statistically significant, the intercepts actually differed by less than one score point (see Table 10), a difference of dubious practical significance. Use of the white equation for blacks would result in a trivial degree of overprediction of FSG--generally less than one score point--for virtually the entire AFQT score range. For SH-6477, both the slopes and the intercepts of the AFQT were significantly different for the two race subgroups. Use of the white regression equation for blacks would result in underprediction of FSG for virtually the entire AFQT score range.

DISCUSSION AND CONCLUSIONS

Total School Samples

Validity of ASVAB School Selector Composites

In general, the operational Navy ASVAB 8, 9, 10 school selector composites predicted performance reasonably well in Navy technical schools. The overall median validity coefficients of ASVAB school selectors for "A" schools with an FSG criterion ($r_u = .35$, $r_c = .55$) were somewhat lower than those found by Swanson (1979) in his validation of ASVAB Forms 6 and 7 ($r_u = .43$, $r_c = .73$). This difference appeared attributable to the larger proportion of electronics schools with an FSG criterion that were included in Swanson's study. In both Swanson's and the present research, the electronics composite is typically the most predictive ASVAB selector composite.

Table 10
Validation Statistics by Subgroup in 16 "A" Schools for AFQT

Rating Code	Course Code	Sex	N	Mean	SD	r_U	r_C	Intercept	Slope	Error ^a
Male and Female Subgroups										
CTR	6301	M	97	67.4	17.8	.53	.62	82.1	.15	4.25
		F	43	66.9	17.1	.46	.55	86.4	.10	3.44
CTT	6302	M	185	65.8	17.1	.59	.68	78.2	.19	4.41
		F	74	64.2	16.6	.46	.57	81.3	.14	4.54
DP	6167	M	215	74.4	12.3	.12	.17	94.2	.03	3.28
		F	158	75.6	13.4	.37	.57	88.8	.10	3.41
MS	6125	M	1413	49.2	16.7	.45	.76	78.9	.14	4.85
		F	168	43.0	15.7	.56	.70	76.5	.20	4.69
SH	6477	M	555	51.8	13.2	.17	.29	85.5	.06	4.79
		F	40	56.5	13.5	.51	.71	82.2	.16	3.76
CTA	6020	M	38	59.7	20.2	.37	.51	88.9	.10	5.20
		F	69	60.2	17.8	.15	.23	94.3	.03	3.77
TMT	6093	M	148	62.4	16.9	.25	.37	83.4	.07	4.80
		F	54	68.7	14.8	.38	.53	77.6	.14	5.23
MR	6068	M	168	59.1	16.5	.26	.51	76.5	.10	5.85
		F	26	72.6	18.2	.19	.38	73.6	.05	5.22
White and Black Subgroups										
CTT	6302	W	210	67.0	17.2	.62	.69	78.1	.19	4.22
		B	47	58.0	13.3	.17	.39	85.5	.06	5.01
DP	6167	W	327	75.4	13.0	.23	.38	91.7	.06	3.41
		B	42	71.1	11.1	.12	.40	93.6	.03	2.99
MS	6125	W	1202	51.2	16.9	.46	.56	78.9	.15	4.80
		B	306	39.1	12.0	.25	.32	79.8	.11	5.06
QM	6001	W	408	61.7	18.4	.46	.54	71.3	.19	6.59
		B	49	46.3	12.4	.13	.25	74.8	.06	5.97
SH	6477	W	416	54.1	13.5	.26	.39	83.7	.10	4.87
		B	147	47.1	11.3	.05	.11	88.7	.02	4.37
SM	6005	W	342	63.1	14.2	.39	.54	81.7	.15	5.14
		B	29	61.2	9.6	.27	.41	81.5	.16	5.51
EM	6070	W	271	64.4	17.9	.34	.45	69.1	.12	5.79
		B	53	49.6	19.2	.40	.50	69.7	.11	4.74
TM	6036	W	170	49.3	16.3	.40	.52	79.3	.13	4.94
		B	42	37.8	17.0	.28	.35	79.7	.10	6.20

Note. Decimal points have been omitted from validity coefficients.

^aStandard error of estimate.

The overall median validity coefficients of the ASVAB school selectors for predicting TIME, particularly for the BE/E schools ($r_U = -.36$, $r_C = -.57$) tended to be higher than those reported by Swanson ($r_U = -.21$, $r_C = -.36$), probably as a result of a difference in the criterion definition: In Swanson's research, TIME included all the days between start and completion of the course. This was a rather inexact measure because it could have included a few nontraining days for some students. In the present research, TIME consisted of the precise number of hours spent in training.

It is interesting that the median validity coefficients of the current ASVAB selector composites for "A" schools with a TIME criterion ($r_U = -.27$, $r_C = -.42$) were markedly lower than those obtained for BE/E schools with a TIME criterion ($r_U = -.36$, $r_C = -.57$), or for "A" schools with an FSG criterion ($r_U = -.35$, $r_C = -.55$). It could be argued that, compared to FSG, time required to complete training is probably more influenced by motivational and personality factors and less influenced by ability (which the ASVAB is intended to measure). However, that the validity of the ASVAB selectors for predicting TIME in BE/E schools was as high as for predicting FSG in "A" schools undermines this explanation. Moreover, this finding suggests that TIME, when defined as the precise number of hours spent in training, is potentially as predictable by the ASVAB as final school grade.

Why, then, were the ASVAB school selector composites found less effective for predicting TIME in "A" schools than for either TIME in BE/E schools or FSG in "A" schools? Since this study included only 12 "A" schools that use a TIME criterion (as compared to 35 "A" schools that use FSG and 53 BE/E schools that use TIME), this low validity may have been simply due to peculiarities or imprecision in the measurement of time in training for these 12 schools. That these 12 "A" school samples were more highly restricted in ability than the BE/E school samples may have contributed to the low validity coefficients because, all else being equal, reduced sample variance results in reduced validity coefficients.

Proposed Changes in ASVAB School Selector Composites

For a large portion of the schools in this study (39 out of 100), one or more alternate ASVAB composites predicted training performance significantly better than did the operational composite, partly because there is not enough differential prediction among the current ASVAB composites. The differential prediction of the ASVAB could be improved by reducing the number of composites. There are presently 12 Navy composites in use, not including the AFQT, several of which are very highly interrelated. The possibility of eliminating redundant composites is currently being investigated.

Despite the appearance that alternate ASVAB composites would often predict performance better than do the current composites, for most schools a change in selector composites was not warranted, for some of the following reasons: (1) The proposed change was not supported by validity data from the present study for related schools, (2) the proposed change was not supported by validity data from earlier studies for the same or related schools, (3) the proposed change would not be logically valid, given the content of the course and of the job, and (4) the composites found to be significantly more valid than the current composite are not presently used by the Navy, and there does not appear to be adequate justification for adding them to the set of current Navy selectors composites. However, based on the results of the correlational and expectancy analyses.

two "A" schools, EM-6070 and QM-6001, were identified for which it appeared that a change of selector composites would substantially improve prediction of school performance (FSG).

For the EM "A" school, using the proposed composite (AR + MK + EI + GS) with a cutting score of 200 would result in an increase in validity for predicting final school grade, an increase in the number of expected graduates, and a decrease in the number of expected drops. Because EM BE/E school is a prerequisite for EM "A" school, however, a change in the selector composite for the "A" school would require a change in the selector for the corresponding BE/E schools, of which there are three (6258, 6273, and 6303). Correlational results suggested that a change to AR + MK + EI + GS would neither improve nor impair prediction of performance (TIME) in the EM BE/E schools to any substantial extent. Expectancy analysis results showed that use of the proposed composite would result in more graduates and fewer drops than are yielded with the current composite (AR+2MK+GS). Overall, a change in operational ASVAB selector composites for the EM schools seems warranted (see Table 11).

For the QM "A" school, which has no prerequisite BE/E school, a change to the proposed composite (AR + 2MK + GS) with a cutting score of 190 would result in an increase in validity for predicting FSG, a greater number of graduates, and fewer drops than occur with the current composite (VE + AR). Thus, a change in the ASVAB selection criteria for this school appears warranted (see Table 11).

The ASVAB validity results obtained (for total school samples) in this study may be regarded with a reasonable degree of confidence because most of the samples used were fairly large and because the results were generally consistent with those obtained in earlier ASVAB validations.

Validity of AFQT

While the AFQT is not used to select students for Navy technical schools, it is, nevertheless, regarded as a general measure of cognitive ability and therefore would be expected to be reasonably predictive of school performance. In fact, the results for the AFQT were very similar to those obtained for the ASVAB school selector composites. AFQT was found to be moderately predictive of training performance for the "A" and BE/E schools in this research.

Sex and Race Subgroups

The results obtained for the sex and race subgroups should be evaluated with caution and regarded as suggestive, rather than conclusive, because the samples analyzed were small. Only a small fraction of the 100 schools used in the study (the DP and MS "A" schools for the sex analyses and the SH and MS "A" schools for the race analyses) had even marginally sufficient quantities of data to permit use of the moderated multiple regression strategy (Barlett et al., 1978), which appears to be the most appropriate method for evaluating differential prediction of subgroup samples.

Validity of ASVAB School Selector Composites

Comparisons of the validity coefficients of ASVAB school selector composites for males and females (in eight schools) did not reveal a systematic tendency for higher validity coefficients to be obtained for either sex group; however, the more appropriate moderated multiple regression technique detected male and female slope differences for

Table II
Proposed Changes in Selector Composites by Technical School

Rating Code	Course Code	N	Current Selector Composite	r_u	r_c	Proposed Selector Composite	r_u	r_c	Criterion
EM	6070(A)	369	BE/E(AR+2MK+GS)	35	44	ELEC(AR+MK+EI+GS)	40	48	FSG
EM	6258(BE/E)	490	BE/E(AR+2MK+GS)	-39	-55	ELEC(AR+MK+EI+GS)	-35	-53	FSG
EM	6273(BE/E)	269	BE/E(AR+2MK+GS)	-61	-70	ELEC(AR+MK+EI+GS)	-60	-70	TIME
EM	6303(BE/E)	164	BE/E(AR+2MK+GS)	-27	-46	ELEC(AR+MK+EI+GS)	-29	-46	TIME
QM	6001(A)	473	GT(VE+AR)	47	54	BE/E(AR+2MK+GS)	52	58	FSG

Note. Decimal points have been omitted from correlation coefficients.

both of the schools analyzed. Thus, separate within-group regression equations would be required to best represent the relationship between ASVAB composite and final grade. Furthermore, either (1) different selection criteria should be used for each sex group, or (2) selection variables that would reduce differential prediction of performance for sex subgroups without markedly reducing predictive accuracy should be sought. Because of the tentative nature of these findings, however, no firm conclusions are drawn at this time; further investigation of these issues is needed.

The ASVAB school selector composite appeared somewhat more valid for whites than for blacks in seven out of eight schools. The moderated multiple regression analyses revealed neither a slope nor an intercept difference for the MS-6125 school, and an intercept (but no slope) difference for the SH-6477 school. These findings suggest that only a single regression equation is needed for MS-6125, and also that steps should be taken to reduce differential prediction for blacks and whites in SH-6477. Again, these findings should be regarded as tentative.

Validity of AFQT

For the analyses of sex subgroups, the findings for the AFQT were virtually the same as for the ASVAB school selector composites, but the AFQT findings for the race subgroup analyses were different. The validity of the AFQT was higher for whites than for blacks in seven out of eight schools; in addition, a small but significant intercept difference was found for the MS-6125 school and slope and intercept differences were found for SH-6477. While it appears that changes in the selection measures used for these schools may be warranted, again, further investigation of this issue will be required before any firm conclusions can be drawn.

RECOMMENDATIONS

1. To improve prediction of performance in two "A" schools (EM-6070, OM-6001) and three BE/E schools ((EM-6258, EM-6273, EM-6303), the proposed ASVAB 8, 9, and 10 composites presented in Table 11 should be adopted.
2. Further research should be conducted to improve the ASVAB's differential prediction of performance across Navy technical schools.
3. Further research should be conducted to determine whether the use of the ASVAB school selector composites or the AFQT may result in differential prediction of performance for sex or race subgroups.

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APPENDIX A

**BIVARIATE AND MULTIPLE CORRELATIONS BETWEEN PRIMARY
PREDICTOR SCORES AND SCHOOL PERFORMANCE**

Table A-1

Bivariate and Multiple Correlations Between Primary Predictor
Scores and School Performance for 11 "A" Schools Using the
General Technical (VE + AR) Composite

Rating School Criterion N	ABE 6513 FSG 72		ABF 6512 FSG 96		ABH 6527 FSG 69		CTR 6301 FSG 140		CTT 6302 FSG 259		CTT 6320 FSG 63	
Predictor	r _u	r _c	r _u	r _c	r _u	r _c	r _u	r _c	r _u	r _c	r _u	r _c
ASVAB Tests												
GS	38	53	39	49	47	57	33	43	40	51	17	29
AR	31	49	32	45	29	45	40	51	56	65	44	53
WK	27	45	25	39	34	47	38	49	36	48	22	36
PC	30	47	26	38	29	41	44	53	36	46	36	45
NO	-06	-01	03	03	13	24	24	29	13	17	02	05
CS	09	19	02	10	14	20	36	42	27	32	33	35
AS	44	53	40	49	56	63	11	19	32	41	40	47
MK	36	50	20	29	30	43	48	56	54	63	47	55
NC	45	56	35	46	47	55	21	31	36	46	35	44
EI	30	39	38	48	54	61	18	27	31	41	22	30
VE	30	48	27	41	38	50	44	53	39	51	29	41
R9	58		52		63		56		64		65	
Navy Selector Composites												
GT	41	56	38	50	42	54	50	59	60	68	44	53
MECH	50	61	44	54	60	67	28	38	42	53	43	52
ELEC	50	62	47	56	54	63	45	54	57	66	42	52
CLER	12	29	15	28	30	43	44	52	36	45	34	42
AM	47	60	37	49	53	62	36	47	44	55	38	48
BE/E	46	59	38	49	41	53	49	57	59	67	48	56
BT/EN/MM	54	64	41	51	55	63	37	47	53	62	52	59
CT	21	40	40	51	33	47	49	57	50	60	44	53
HM	44	58	24	39	48	58	49	57	55	64	39	49
MR	52	62	46	56	57	65	28	40	48	58	49	57
SUB	50	62	41	52	52	61	43	53	55	65	45	54
ELEC Comp	48	60	45	55	56	64	41	51	52	63	36	46
AFQT	32	51	38	50	39	52	51	59	56	65	39	50

Notes: Decimal points have been omitted from correlations
r_u = Uncorrected validity; r_c = Corrected validity.

Table A-1 (Continued)

Rating	DP		MS		QM		SH		SM	
School	6167		6125		6001		6477		6005	
Criterion	FSG		FSG		FSG		FSG		FSG	
N	373		1581		473		595		377	
Predictor	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests										
GS	12	27	36	46	29	37	11	23	17	36
AR	16	35	38	50	47	53	08	24	31	49
WK	10	29	31	43	27	36	17	29	11	32
PC	11	26	26	37	25	33	14	26	13	32
NO	19	28	15	19	26	30	04	08	31	38
CS	16	26	16	20	32	36	10	15	32	42
AS	09	22	26	35	24	30	08	17	10	21
MK	25	39	36	46	50	56	24	33	31	48
MC	14	28	30	40	43	49	04	16	20	37
FI	15	28	29	38	26	33	13	22	16	31
VE	19	36	33	45	29	38	17	30	13	36
R9	31		50		57		31		44	
Navy Selector Composites										
GT	23	39	47	57	47	54	19	32	32	50
MECH	16	32	38	48	40	47	12	25	19	38
ELEC	24	39	48	57	49	55	22	33	33	50
CLER	23	36	30	40	39	46	15	25	38	51
AM	19	35	38	49	42	50	12	26	21	42
BE/E	25	40	46	56	52	58	22	34	34	51
BT/EN/MM	21	37	40	50	49	55	20	31	28	45
CT	25	39	38	49	47	54	16	29	43	56
HM	25	40	45	55	44	52	23	35	28	47
MR	16	33	40	51	47	54	09	24	25	44
SUB	21	38	46	56	50	56	14	29	30	49
ELEC Comp	23	38	45	54	45	51	22	33	29	47
AFQT	23	39	46	56	47	53	20	33	39	54

Notes. Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-2

Bivariate and Multiple Correlations for Primary Predictor Scores
Against School Performance for Nine "A" Schools Using the
Mechanical (VE + MC + AS) Composite

Rating School Criterion N	BU 6286 FSG 203	CM 6291 FSG 79	EO 6292 FSG 181	GNT 6025 FSG 99	HT 6106 FSG 53	HT 6119 FSG 390						
Predictor	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests												
GS	09	39	08	22	11	25	45	68	13	23	30	53
AR	37	57	27	33	28	37	37	54	10	21	29	52
WK	09	44	-08	08	10	26	43	66	-08	10	24	51
PC	26	51	-06	08	09	22	33	59	-08	07	24	46
NO	11	15	-02	06	00	-07	21	20	-08	-07	07	11
CS	20	35	14	17	02	01	26	22	15	22	17	26
AS	24	55	29	40	16	31	14	49	18	28	18	48
MK	32	49	11	25	30	38	35	54	00	15	32	53
MC	42	66	25	38	18	33	32	61	19	29	21	51
EI	18	47	13	26	07	22	18	45	09	21	29	52
VE	15	48	-09	08	10	26	43	67	-11	09	27	53
R9	52		44		36		58		52		45	
Navy Selector Composites												
GT	36	61	15	29	26	38	49	69	03	18	34	57
MECH	43	67	23	37	22	36	48	71	13	25	34	59
ELEC	37	62	21	35	29	40	50	71	10	23	42	62
CLER	21	45	03	13	05	09	42	56	-01	09	22	41
AM	39	65	13	30	19	34	50	72	06	21	31	57
BE/E	36	58	18	32	33	42	46	66	07	20	39	59
BT/EN/MM	39	63	24	37	31	41	40	66	09	23	35	58
CT	31	54	13	25	16	24	45	61	04	16	29	51
HM	27	56	06	23	26	38	50	71	02	17	40	61
MR	49	70	34	43	29	40	44	69	20	29	32	58
SUB	45	68	22	36	28	40	53	73	10	23	34	59
ELEC Comp	29	57	15	30	25	37	48	70	08	21	42	62
AFQT	32	58	10	25	22	34	46	66	-02	13	32	56

Notes. Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-2 (continued)

Rating	HT		SW		UT	
School	6120		6288		6290	
Criterion	FSG		FSG		FSG	
N	297		85		77	
Predictor	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests						
GS	14	38	06	18	11	18
AR	31	49	04	15	32	35
WK	16	39	02	15	07	15
PC	28	47	18	27	17	23
NO	17	13	-07	-09	18	15
CS	16	12	19	16	01	01
AS	14	43	13	25	18	25
MK	28	44	08	18	42	45
MC	19	46	23	32	02	13
FI	16	42	-11	04	17	23
VE	21	45	07	19	11	19
R9	41		48		51	
Navy Selector Composites						
GT	33	53	07	20	29	34
MECH	30	54	20	31	15	23
ELEC	34	55	03	17	40	43
CLER	24	32	09	13	14	17
AM	28	53	20	30	08	18
BE/E	32	51	08	20	45	48
BT/EN/MM	31	53	13	25	41	43
CT	31	45	09	17	24	27
HM	23	51	09	21	34	38
MR	33	55	16	27	26	31
SUB	35	56	15	27	23	29
ELEC Comp	29	51	02	16	35	39
AFQT	34	52	05	17	30	35

Notes. Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-3

Bivariate and Multiple Correlations for Primary Predictor Scores
Against School Performance for 13 "A" Schools Using the
Electronics (AR + MK + EI + GS) Composite

Rating School Criterion N	AD 6501 Time 880	AQ 6240 Time 475	AT 6239 Time 1489	AX 6241 Time 288	DS 6131 FSG 118	EW 602A Time 400						
Predictor	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests												
GS	-17	-34	-11	-32	-07	-25	-05	-29	-05	36	-11	-33
AR	-29	-44	-24	-42	-21	-36	-27	-44	34	56	-25	-41
WK	-18	-32	-20	-35	-12	-27	-16	-35	05	37	-21	-36
PC	-18	-31	-16	-30	-09	-22	-27	-42	17	42	-17	-32
NO	-13	-17	-24	-33	-21	-26	-22	-26	11	22	-16	-25
CS	-15	-17	-26	-36	-24	-29	-31	-37	27	45	-21	-30
AS	-25	-37	-20	-33	-14	-26	-13	-29	05	29	-12	-26
MK	-26	-42	-19	-38	-21	-36	-23	-41	42	61	-13	-35
MC	-25	-39	-21	-37	-17	-30	-18	-36	16	41	-02	-21
EI	-19	-36	-10	-29	-14	-30	-16	-35	06	39	-02	-23
VE	-18	-32	-21	-36	-12	-27	-21	-39	10	41	-22	-38
R9	41		40		35		43		56		34	
Navy Selector Composites												
GT	-31	-46	-28	-44	-21	-36	-29	-46	28	54	-29	-44
MECH	-29	-43	-27	-42	-19	-33	-22	-40	13	43	-16	-34
ELEC	-35	-50	-26	-43	-24	-38	-28	-45	32	57	-20	-39
CLER	-22	-31	-34	-46	-27	-36	-35	-46	25	48	-26	-39
AM	-27	-42	-26	-42	-18	-33	-23	-41	17	46	-14	-33
BE/E	-32	-48	-24	-42	-23	-37	-26	-44	42	61	-19	-39
BT/EN/MM	-36	-50	-27	-44	-24	-38	-26	-44	35	57	-17	-37
CT	-29	-42	-35	-48	-30	-41	-38	-51	31	54	-29	-43
HM	-29	-45	-25	-43	-19	-35	-23	-43	25	53	-20	-39
MK	-34	-48	-29	-45	-23	-37	-25	-43	22	49	-18	-37
SUB	-33	-48	-30	-46	-23	-37	-28	-45	28	54	-23	-41
ELEC Comp	-31	-47	-22	-41	-21	-36	-23	-43	24	53	-14	-37
AFQT	-32	-47	-33	-47	-25	-38	-34	-49	26	52	-30	-45

Notes. Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-3 (continued)

Rating	EW	FTG	FTG	FTM	FTM	SWS						
School	602D	6376	6377	6027	6108	6146						
Criterion	Time	FSG	FSG	FSG	FSG	FSG						
N	408	117	245	172	134	187						
Predictor	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests												
GS	-12	-34	21	56	20	47	21	64	17	54	19	52
AK	-28	-44	26	61	22	49	33	68	28	58	26	57
WK	-14	-31	14	49	15	40	35	67	29	57	10	37
PC	-08	-26	15	45	21	43	25	54	28	56	14	40
NO	-15	-25	19	34	14	25	11	12	02	01	06	05
CS	-21	-30	08	26	12	22	17	24	21	27	08	12
AS	-14	-28	16	38	22	41	20	48	21	41	20	43
MK	-11	-34	48	72	27	53	44	74	44	68	30	59
MC	00	-20	37	59	27	48	21	53	21	48	27	50
EI	-03	-25	14	53	07	37	28	65	14	50	26	56
VE	-13	-32	16	52	20	45	36	68	29	59	10	39
R9	35		59		41		60		55		43	
Navy Selector Composites												
GT	-26	-43	27	63	27	53	42	74	36	64	25	57
MECH	-12	-32	32	61	32	54	32	65	32	59	26	53
ELEC	-21	-41	45	72	32	57	52	80	42	68	41	67
CLER	-23	-37	19	47	20	39	25	43	22	39	10	22
AM	-07	-29	35	63	31	54	35	68	32	61	25	53
BE/E	-19	-40	50	74	32	57	50	78	45	69	37	65
BT/EN/MI	-17	-38	48	72	34	57	47	76	46	69	36	63
CT	-28	-43	24	56	24	47	32	59	21	51	17	40
HM	-16	-36	42	70	32	57	47	77	42	58	31	62
MR	-19	-38	37	65	33	56	32	67	33	61	32	60
SUB	-19	-39	40	69	35	58	41	74	37	65	32	61
ELEC Comp	-13	-37	44	71	28	55	48	78	37	66	38	65
AFQT	-26	-43	27	61	27	52	40	71	31	60	22	52

Notes. Decimal points have been omitted from correlations

r_u = Uncorrected validity; r_c = Corrected validity.

Table A-3 (continued)

Rating	TD	
School	6242	
Criterion	Time	
	<u>N</u>	303
Predictor	r_u	r_c
ASVAB Tests		
GS	-03	-23
AR	-20	-35
WK	-09	-25
PC	-08	-21
NO	-17	-23
CS	-22	-27
AS	-12	-24
MK	-16	-32
MC	-22	-35
EI	-21	-35
VE	-08	-24
R9	39	
Navy Selector Composites		
GT	-17	-33
MECH	-19	-33
ELEC	-23	-37
CLER	-23	-33
AN	-20	-35
BE/E	-18	-34
BT/EN/NM	-19	-34
CT	-26	-38
HM	-13	-31
MR	-23	-37
SUB	-23	-37
ELEC Comp	-20	-36
AFQT	-21	-36

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-4

Bivariate and Multiple Correlations for Primary Predictor Scores
Against School Performance for One "A" School Using the
Clerical (VE+NO+CS) Composite

Rating	CTA	
School	6020	
Criterion	FSG	
N	107	

Predictor	r_u	r_c
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ASVAB Tests

GS	17	22
AR	23	33
WK	22	33
PC	19	29
NO	-04	19
CS	14	30
AS	06	13
MK	13	25
NC	23	28
EI	06	16
VE	23	34
R9	40	

Navy Selector Composites

GT	26	37
MECH	21	30
ELEC	19	30
CLER	23	37
AM	27	36
BE/E	19	30
BT/EN/MM	13	25
CT	27	39
HM	20	31
MR	21	30
SUB	28	38
ELEC Comp	15	26
AFQT	25	37

Notes. Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-5

Bivariate and Multiple Correlations for Primary Predictor Scores
Against School Performance for Five "A" Schools Using the
BE/E (AR+2MK+GS) Composite

Rating School Criterion N	CE 6289 FSG 126	EM 6070 FSG 369	IC 605Z Time 658	TM 6036 FSG 219	TMT 6093 FSG 202					
Predictor	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests										
GS	15	28	25	35	-18	-34	27	40	31	42
AR	25	37	33	42	-31	-46	37	49	17	32
WK	26	36	14	24	-21	-35	28	39	26	37
PC	07	16	21	30	-26	-37	20	32	20	29
NO	13	17	18	23	-23	-29	06	12	08	16
CS	09	13	21	27	-22	-27	09	13	09	16
AS	22	28	20	25	-26	-36	31	40	28	36
MK	18	33	27	38	-23	-41	22	39	11	31
MC	34	42	27	35	-21	-34	37	46	23	34
EI	15	26	33	39	-23	-35	27	37	23	33
VE	23	33	17	27	-25	-38	29	41	29	39
R9	41		44		44		48		40	
Navy Selector Composites										
GT	30	40	29	39	-33	-47	40	51	28	41
MECH	33	41	26	35	-30	-43	40	50	34	44
ELEC	25	37	40	48	-34	-48	39	50	31	43
CLER	22	31	26	35	-33	-43	23	34	21	32
AM	34	43	26	36	-27	-41	40	50	32	55
BE/E	24	37	35	44	-32	-47	35	47	25	39
BT/EN MM	27	38	31	41	-34	-48	35	47	29	41
CT	27	37	32	41	-38	-50	32	44	24	36
HM	24	36	29	39	-30	-45	33	46	33	45
MR	35	44	33	41	-32	-46	46	55	29	41
SUB	36	45	32	41	-33	-47	46	55	31	43
ELEC Comp	21	34	38	46	-30	-45	34	47	31	43
AFQT	31	41	31	40	-37	-50	40	51	27	40

Notes: Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-6

Bivariate and Multiple Correlations for Primary Predictor Scores
Against School Performance for Three "A" Schools Using the
BT/EN/MM (MK + AS) Composite

Rating School Criterion N	BT 6486 Time 2085	EN 6487 Time 1258	MM 6492 Time 2598			
Predictor	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests						
GS	-24	-31	-18	-29	-18	-26
AR	-31	-37	-22	-32	-23	-31
WK	-28	-34	-16	-26	-16	-24
PC	-26	-32	-19	-27	-15	-22
NO	-22	-25	-16	-19	-15	-18
CS	-25	-28	-10	-12	-19	-21
AS	-16	-25	-26	-37	-13	-23
MK	-31	-38	-13	-26	-22	-30
MC	-24	-31	-25	-35	-16	-25
EI	-27	-33	-21	-31	-17	-25
VE	-30	-36	-20	-30	-18	-26
R9	42		36		32	
Navy Selector Composites						
GT	-35	-41	-25	-35	-25	-33
MECH	-28	-35	-30	-40	-19	-28
ELEC	-36	-42	-26	-37	-27	-35
CLER	-36	-41	-22	-29	-26	-32
AM	-30	-37	-27	-37	-20	-29
BE/E	-35	-41	-21	-33	-26	-34
BT/EN/MM	-32	-39	-28	-39	-25	-33
CT	-39	-44	-26	-35	-29	-36
HM	-34	-40	-22	-33	-25	-33
MR	-30	-37	-31	-41	-22	-31
SUB	-34	-40	-29	-39	-24	-32
ELEC Comp	-34	-40	-23	-35	-25	-33
AFQT	-38	-43	-28	-38	-27	-34

Notes. Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-7

Bivariate and Multiple Correlations for Primary Predictor Scores
Against School Performance for One "A" School Using the
MR (AR + MC + AS) Composite

Rating	MR	
School	6068	
Criterion	FSG	
<u>N</u>	194	
Predictor	r_u	r_c
ASVAB Tests		
GS	07	26
AR	29	55
WK	-03	03
PC	05	20
NO	07	14
CS	03	11
AS	31	55
MK	30	49
MC	41	63
EI	27	46
VE	-01	10
R9	52	
Navy Selector Composites		
GT	21	47
MECH	39	62
ELEC	34	57
CLER	05	16
AM	30	54
BE/E	30	53
BT/EN/MM	43	64
CT	15	37
HM	19	41
MR	48	67
SUB	35	59
ELEC Comp	31	54
AFQT	16	41

Notes. Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-8

Bivariate and Multiple Correlations for Primary
Predictor Scores Against School Performance for
Four "A" Schools Using Multiple Composites

Rating School	GSE/GSM		GSM		RM		TMS	
	8563		8564		606D		6034	
Composites Used	ELEC, BT/EN/MM		ELEC, BT/EN/MM		ELEC,CLER, SUB,VE		BE/E SUB,VE	
Criterion	FSG		FSG		Time		FSG	
<u>N</u>	117		84		302		82	
Predictor	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests								
GS	25	63	20	53	-03	-35	21	42
AR	18	60	19	53	-29	-51	23	45
WK	25	58	12	39	-06	-34	15	36
PC	20	50	27	52	-12	-31	22	42
NO	06	22	05	11	-31	-34	15	17
CS	08	38	07	18	-26	-32	14	17
AS	20	43	14	21	-01	-22	34	45
MK	40	68	29	59	-32	-53	21	43
MC	25	58	26	51	-03	-32	30	49
EI	29	64	20	50	02	-32	30	40
VE	26	59	18	46	-09	-36	20	41
R9	53		43		45		55	
Navy Selector Composites								
GT	27	65	24	57	-26	-50	27	49
MECH	33	65	28	53	-04	-35	40	56
ELEC	46	75	36	63	-27	-52	37	55
CLER	16	49	11	29	-35	-49	22	34
AM	31	65	26	54	-06	-38	35	54
BE/E	45	74	33	62	-35	-55	27	49
BT/EN/MM	47	74	35	62	-22	-48	38	55
CT	19	57	15	42	-39	-57	26	43
HM	45	74	34	62	-24	-50	29	50
MR	31	66	31	59	-12	-42	44	59
SUB	32	68	30	60	-19	-47	38	56
ELEC Comp	49	76	38	64	-19	-31	37	55
AFQT	25	63	23	53	-34	-54	28	49

Notes. Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-9

Bivariate and Multiple Correlations for Primary Predictor Scores
Against School Performance for One BE/E Schools Using the
Technical (VE+MC+AS) Composite

Rating	MN	
School	606G	
Criterion	TIME	
<u>N</u>	58	
Predictor	r_u	r_c
ASVAB Tests		
GS	-08	-26
AR	-56	-61
WK	-21	-36
PC	-20	-41
NO	-32	-23
CS	-41	-43
AS	-03	-26
MK	-44	-37
MC	-06	-29
EI	02	-18
VE	-25	-40
R9	65	
Navy Selector Composites		
GT	-50	-58
MECH	-20	-58
ELEC	-40	-49
CLER	-44	-49
AM	-23	-40
BE/E	-47	-51
BT/EN/MM	-44	-53
CT	-53	-58
HM	-34	-44
MR	-41	-50
SUB	-49	-55
ELEC Comp	-26	-38
AFQT	-52	-59

Notes. Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-10

Bivariate and Multiple Correlations for Primary Predictor Scores
Against School Performance for 24 BE/E Schools Using the
Electronics (AR + MK + EI + GS) Composite

Rating School Criterion	AQ	AT	AX	CTM	DS	DS						
N	6231	6230	6232	6308	6269	6309						
	TIME	TIME	TIME	TIME	TIME	TIME						
	794	2245	449	275	226	129						
Predictor	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests												
GS	-10	-47	-19	-49	-13	-50	-09	-45	-21	-54	-06	-37
AR	-41	-67	-41	-63	-43	-68	-25	-52	-39	-65	-28	-49
WK	-15	-42	-17	-43	-19	-49	-11	-37	-07	-39	02	-28
PC	-11	-37	-18	-39	-21	-48	-14	-39	-16	-49	-08	-29
NO	-29	-43	-23	-31	-23	-31	-12	-23	-29	-38	-21	-28
CS	-30	-44	-27	-35	-20	-30	-23	-36	-21	-28	-33	-47
AS	-14	-38	-22	-41	-21	-44	-12	-29	-14	-44	-18	-36
MK	-46	-69	-47	-67	-45	-70	-15	-47	-30	-60	-18	-43
MC	-30	-54	-32	-52	-35	-59	-20	-43	-30	-57	-24	-45
EI	-15	-47	-28	26	07	22	18	45	09	21	29	52
VE	-15	-44	-19	-45	-19	-49	-15	-43	-09	-45	-02	-31
RY	57		58		59		41		53		48	
Navy Selector Composites												
GT	-37	-65	-37	-61	-38	-66	-25	-53	-31	-62	-22	-46
MECH	-27	-56	-32	-55	-33	-60	-22	-48	-25	-57	-21	-44
ELEC	-47	-71	-50	-69	-50	-73	-29	-57	-43	-69	-29	-51
CLER	-36	-57	-32	-48	-29	-49	-22	-42	-30	-49	-29	-46
AM	-30	-58	-32	-50	-34	-61	-24	-51	-27	-59	-18	-44
BE/E	-49	-72	-50	-69	-50	-73	-21	-53	-39	-67	-23	-48
BT/EN/MM	-42	-67	-48	-67	-48	-71	-22	-51	-31	-62	-28	-50
CT	-43	-66	-40	-59	-39	-62	-26	-50	-38	-61	-33	-52
HM	-38	-66	-40	-63	-39	-68	-18	-51	-30	-63	-13	-43
MR	-38	-65	-41	-63	-43	-68	-25	-51	-34	-63	-31	-51
SUB	-41	-67	-42	-64	-44	-69	-31	-57	-37	-65	-27	-50
ELEC Comp	-40	-68	-46	-67	-43	-70	-24	-55	-38	-66	-23	-48
AFQT	-37	-63	-36	-59	-41	-67	-22	-50	-37	-64	02	-27

Notes. Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-10 (continued)

Rating School Criterion	DS 6366 TIME	ET 6403 TIME	ET 6409 TIME	ET 6414 TIME	EW 6254 TIME	EW 6275 TIME						
<u>N</u>	151	958	511	928	68	166						
Predictor	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests												
GS	-14	-43	-11	-50	-11	-47	-16	-45	-20	-43	-15	-61
AR	-14	-43	-25	-55	-24	-53	-27	-51	-32	-50	-41	-72
WK	-07	-36	-07	-37	-05	-38	-13	-39	-04	-17	-06	-45
PC	-04	-17	-09	-35	-03	-30	-15	-37	-15	-36	-29	-64
NO	-23	-35	-13	-16	-26	-34	-20	-27	-30	-33	-33	-43
CS	-16	-26	-20	-27	-23	-34	-18	-25	-27	-37	-39	-56
AS	-14	-30	-14	-38	-17	-41	-14	-34	-37	-49	-12	-20
NK	-21	-47	-32	-60	-31	-58	-34	-56	-14	-39	-39	-73
NC	-30	-49	-18	-45	-18	-43	-24	-45	-28	-46	-23	-54
EI	-25	-49	-17	-50	-21	-51	-18	-43	-16	-37	-25	-63
VE	-04	-33	-11	-41	-04	-39	-17	-41	-02	-27	-15	-55
R9	44		43		46		44		59		60	
Navy Selector Composites												
GT	-11	-42	-22	-55	-18	-51	-27	-52	-21	-43	-37	-72
MECH	-22	-45	-21	-51	-20	-49	-25	-49	-32	-49	-24	-59
ELEC	-29	-53	-36	-64	-35	-61	-36	-58	-30	-50	-47	-77
CLER	-22	-40	-21	-36	-28	-47	-25	-41	-31	-44	-44	-66
AM	-23	-47	-20	-51	-16	-48	-26	-49	-22	-44	-25	-63
BE/E	-24	-50	-34	-63	-33	-60	-36	-58	-24	-46	-44	-75
BT/EN/MM	-24	-48	-33	-61	-32	-59	-33	-56	-34	-51	-39	-72
CT	-22	-45	-25	-48	-31	-54	-30	-50	-36	-51	-50	-74
HM	-19	-48	-27	-59	-24	-56	-31	-55	-17	-43	-34	-72
MR	-27	-50	-26	-56	-27	-55	-29	-53	-44	-57	-36	-68
SUB	-24	-49	-27	-58	-23	-54	-31	-55	-30	-49	-38	-72
ELEC Comp	-29	-53	-32	-62	-32	-60	-34	-57	-25	-47	-40	-74
AFQT	-16	-44	-21	-51	-24	-53	-27	-51	-26	-45	-43	-73

Notes. Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-10 (continued)

Rating	EW		FTG		FTG		FTG		FTM		FTM	
School	6306		6248		6310		6359		6249		6311	
Criterion	Time		Time		Time		Time		TIME		Time	
N	550		415		221		220		284		190	
Predictor	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests												
GS	-08	-46	-07	-39	-10	-43	-16	-51	-02	-43	-04	-54
Ac	-37	-62	-34	-57	-34	-58	-33	-61	-24	-55	-30	-70
WK	-08	-40	-04	-31	-17	-39	-05	-38	-14	-46	-11	-49
PC	-20	-46	-13	-33	-06	-29	-09	-37	-10	-37	-31	-58
NO	-23	-33	-29	-37	-24	-32	-30	-44	-15	-20	-23	-35
CS	-25	-37	-23	-35	-34	-44	-19	-20	-24	-36	-28	-43
AS	-23	-47	-21	-36	-07	-21	-14	-36	-20	-38	-05	-32
MK	-43	-67	-41	-62	-29	-56	-33	-63	-42	-65	-45	-76
MC	-22	-49	-23	-42	-19	-43	-15	-43	-28	-49	-14	-47
EI	-11	-45	-19	-44	-13	-41	-06	-44	-27	-54	-11	-47
VE	-12	-45	-08	-35	-14	-38	-07	-42	-13	-45	-19	-56
R9	53		53		48		49		57		54	
Navy Selector Composites												
GT	-32	-61	-28	-54	-32	-57	-27	-59	-24	-56	-32	-71
MECH	-27	-56	-25	-48	-17	-42	-17	-50	-28	-54	-17	-56
ELEC	-41	-67	-41	-62	-36	-60	-38	-66	-39	-65	-44	-77
CLER	-29	-48	-31	-48	-35	-50	-29	-46	-26	-45	-32	-55
AM	-22	-53	-21	-46	-22	-49	-15	-49	-27	-54	-22	-60
BE/E	-45	-68	-41	-62	-34	-59	-39	-66	-39	-64	-45	-77
BT/EN/MM	-45	-68	-45	-64	-27	-54	-35	-64	-45	-67	-42	-75
CT	-36	-59	-37	-57	-40	-59	-34	-57	-30	-55	-37	-67
HM	-33	-63	-29	-56	-27	-56	-31	-63	-29	-60	-38	-74
MR	-37	-63	-36	-57	-26	-52	-29	-59	-35	-60	-22	-64
SUB	-34	-63	-32	-56	-33	-58	-27	-60	-32	-60	-31	-70
ELEC Comp	-34	-63	-35	-59	-28	-57	-30	-63	-37	-64	-39	-75
AFQT	-33	-60	-32	-55	-33	-56	-30	-59	-26	-56	-37	-72

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-10 (continued)

Rating	FTM		GMG		GMM		GMT		STG		TD	
School	6358		6370		6368		6369		6276		6233	
Criterion	TIME		TIME		TIME		TIME		TIME		TIME	
N	166		369		264		224		149		430	
Predictor	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c

ASVAB Tests

GS	-11	-48	-14	-38	-06	-39	-19	-34	-01	-27	-14	-48
AR	-17	-49	-32	-51	-31	-58	-35	-47	-13	-36	-40	-65
WK	01	-35	-20	-39	02	-29	-19	-32	06	-20	-07	-37
PC	-07	-33	-19	-36	-12	-35	-26	-37	-06	-25	-05	-29
NO	-30	-36	-16	-23	-24	-38	-29	-32	-22	-25	-20	-30
CS	-15	-19	-15	-22	-27	-31	-22	-23	-25	-26	-17	-24
AS	-10	-35	-09	-24	-14	-24	-15	-25	-25	-38	-15	-37
MK	-43	-66	-44	-59	-35	-61	-44	-53	-22	-42	-48	-69
MC	-06	-37	-32	-47	-13	-39	-27	-38	-27	-43	-33	-55
EI	-18	-49	-12	-35	-12	-41	-20	-35	-08	-33	-16	-47
VE	-03	-38	-21	-40	-03	-34	-24	-37	02	-23	-07	-38
R9	53		51		49		51		50		58	

Navy Selector Composites

GT	-14	-51	-34	-53	-25	-56	-37	-49	-09	-35	-31	-60
MECH	-09	-44	-27	-46	-15	-42	-29	-41	-26	-43	-26	-53
ELEC	-38	-64	-40	-57	-38	-63	-41	-52	-20	-42	-48	-70
CLER	-25	-41	-24	-38	-30	-48	-35	-42	-27	-37	-22	-40
AM	-06	-43	-33	-51	-11	-43	-31	-43	-20	-40	-29	-56
BE/E	-40	-65	-44	-60	-38	-63	-44	-54	-21	-42	-50	-71
BT/EN/MM	-39	-64	-39	-56	-35	-60	-39	-50	-36	-50	-44	-67
CT	-28	-51	-30	-47	-36	-58	-42	-51	-28	-43	-32	-56
HM	-30	-61	-37	-56	-24	-56	-37	-49	-14	-39	-36	-64
MR	-15	-49	-33	-51	-29	-56	-35	-47	-31	-47	-38	-63
SUB	-13	-50	-40	-57	-24	-55	-38	-50	-22	-42	-40	-65
ELEC Comp	-37	-64	-36	-55	-31	-60	-37	-49	-18	-41	-42	-67
AFQT	-25	-55	-34	-52	-28	-57	-41	-52	-15	-36	-31	-59

Notes. Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-11 (continued)

Rating	TMT	
School	6551	
Criterion	Time	
<u>N</u>	101	
Predictor	r_u	r_c
ASVAB Tests		
GS	-05	-40
AR	-40	-64
WK	-06	-39
PC	-09	-33
NO	-40	-53
CS	-37	-50
AS	-15	-33
MK	-45	-69
MC	-25	-45
EI	-15	-39
VE	-09	-41
R9	63	
Navy Selector Composites		
GT	-30	-59
MECH	-21	-47
ELEC	-39	-67
CLER	-42	-63
AM	-21	-49
BE/E	-48	-71
BT/EN/MM	-39	-65
CT	-48	-69
HM	-25	-60
MR	-33	-57
SUB	-33	-60
ELEC Comp	-29	-61
AFQT	-17	-64

Notes. Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-11

Bivariate and Multiple Correlations for Primary Predictor Scores
Against School Performance for 13 BE/E School Using the
BE/E (AR+2MK+GS) Composite

Rating	AE	ASE	CE	CE	CE	EM						
School	6235	6237	6259	6270	6307	6258						
Criterion	TIME	TIME	TIME	TIME	TIME	TIME						
N	1606	120	65	148	291	490						
Predictor	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests												
GS	-15	-34	-20	-44	-24	-45	03	-17	-15	-37	-17	-39
AR	-34	-51	-38	-55	-38	-56	-23	-38	-32	-51	-31	-50
WK	-19	-36	-24	-36	-18	-36	03	-13	-26	-41	-16	-37
PC	-18	-33	-26	-37	-23	-33	-10	-23	-25	-39	-14	-33
NO	-21	-28	-25	-34	-30	-37	-18	-28	-10	-20	-29	-39
CS	-22	-26	-32	-35	-36	-44	-11	-19	-19	-26	-29	-36
AS	-27	-36	-20	-28	-13	-21	06	-04	-24	-33	-19	-35
MK	-36	-53	-43	-59	-39	-58	-28	-43	-29	-51	-39	-55
MC	-29	-43	-40	-50	-18	-35	-07	-22	-27	-41	-25	-42
EI	-27	-39	-33	-42	-25	-39	01	-15	-34	-47	-21	-38
VE	-20	-38	-17	-27	-23	-39	01	-15	-28	-43	-16	-37
R9	51		61		55		35		49		47	
Navy Selector Composites												
GT	-33	-51	-36	-53	-41	-59	-14	-32	-37	-55	-28	-48
MECH	-32	-47	-33	-44	-22	-39	-01	-17	-33	-47	-24	-43
ELEC	-41	-56	-51	-64	-44	-61	-18	-37	-41	-58	-35	-53
CLER	-30	-42	-35	-44	-43	-55	-15	-29	-27	-41	-35	-50
AM	-30	-46	-36	-48	-25	-43	-04	-21	-32	-48	-24	-43
BE/E	-40	-56	-49	-63	-45	-62	-26	-42	-36	-55	-39	-55
BT/EN/MM	-42	-57	-43	-57	-33	-53	-15	-34	-38	-55	-35	-52
CT	-37	-52	-44	-56	-48	-62	-20	-35	-34	-51	-38	-54
HM	-32	-51	-43	-58	-37	-57	-12	-32	-33	-52	-30	-49
MR	-38	-53	-40	-54	-29	-47	-10	-27	-36	-52	-30	-48
SUB	-37	-53	-44	-58	-38	-56	-13	-31	-39	-55	-30	-49
ELEC Comp	-36	-53	-49	-62	-38	-57	-12	-33	-37	-55	-33	-51
AFQT	-35	-51	-33	-49	-43	-59	-17	-34	-36	-53	-32	-50

Notes. Decimal points have been omitted from correlations

r_u = Uncorrected validity; r_c = Corrected validity.

Table A-11

Rating School Criterion	EM 6273 TIME	EM 6303 TIME	IC 6274 TIME	IC 6315 TIME	IC 6367 TIME	TNT 6318 TIME						
N	269	164	600	66	89	256						
Predictor	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests												
GS	-28	-42	04	-17	-22	-41	-06	-33	02	-30	02	-23
AR	-51	-62	-33	-48	-36	-53	-31	-56	-14	-31	-43	-62
WK	-28	-42	-08	-25	-23	-41	-28	-42	-06	-22	-10	-30
PC	-21	-31	-05	-23	-24	-38	-32	-45	-14	-25	-23	-38
NO	-26	-33	-25	-30	-17	-25	06	09	-28	-33	-21	-19
CS	-31	-38	-30	-39	-18	-24	01	07	-28	-34	-26	-28
AS	-19	-35	-16	-20	-23	-35	-27	-42	-29	-38	-10	-25
MK	-55	-67	-24	-44	-34	-53	-52	-69	-31	-42	-30	-56
MC	-40	-50	-17	-30	-27	-42	-26	-44	-09	-24	-11	-30
EI	-37	-47	-20	-28	-38	-42	-31	-49	-20	-30	-13	-29
VE	-27	-41	-07	-27	-26	-42	-27	-42	-08	-23	-15	-35
R9	65		51		47		60		54		54	
Navy Selector Composites												
GT	-45	-58	-25	-44	-37	-54	-37	-59	-14	-31	-36	-57
MECH	-35	-46	-19	-32	-31	-47	-34	-51	-22	-35	-16	-37
ELEC	-60	-70	-29	-46	-43	-59	-44	-65	-22	-37	-33	-58
CLER	-40	-51	-33	-45	-29	-42	-08	-11	-34	-43	-32	-41
AM	-39	-51	-16	-33	-31	-48	-31	-49	-10	-27	-17	-39
BE/E	-61	-70	-27	-46	-42	-59	-48	-67	-24	-38	-38	-61
BT/EN/MM	-50	-62	-29	-45	-38	-55	-50	-67	-40	-49	-27	-53
CT	-48	-59	-39	-52	-37	-52	-19	-36	-32	-43	-44	-59
HM	-49	-62	-12	-36	-36	-55	-41	-63	-15	-32	-21	-50
MR	-46	-57	-28	-42	-35	-52	-36	-57	-23	-37	-25	-47
SUB	-45	-55	-26	-43	-38	-55	-37	-58	-14	-31	-31	-54
ELEC Comp	-55	-67	-20	-41	-38	-56	-41	-63	-21	-36	-21	-50
AFQT	-41	-54	-29	-46	-38	-55	-34	-55	-23	-37	-38	58

Notes. Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-12

Bivariate and Multiple Correlations for Primary Predictor Scores
Against School Performance for 15 BE/E Schools Using the
Multiple Composites

Rating	EM		EM		EM		ET		ET		ET	
School	605R		605U		605V		6256		6271		6304	
Composites Used	GT,MECH		GT,MECH		GT,MECH		GT,MECH		GT,MECH		GT,MECH	
Criterion	ELEC		ELEC		ELEC		ELEC		ELEC		ELEC	
N	592		1109		272		637		412		364	
Predictor	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests												
GS	-11	-25	-15	-37	-17	-49	-21	-48	-19	-46	-13	-43
AR	-12	-29	-20	-44	-30	-59	-24	-53	-14	-49	-25	-55
WK	-04	-25	-04	-36	-06	-48	-05	-44	-11	-48	-09	-49
PC	-01	-22	-12	-39	-09	-47	-07	-42	-09	-47	-06	-44
NO	-16	-23	-15	-24	-14	-21	-20	-33	-16	-31	-11	-14
CS	-13	-22	-18	-29	-18	-32	-17	-35	-18	-35	-24	-30
AS	-24	-31	-27	-39	-17	-33	-26	-43	-32	-46	-22	-37
MK	-15	-28	-26	-42	-29	-53	-23	-49	-21	-46	-20	-47
MC	-22	-32	-28	-43	-27	-48	-23	-42	-24	-45	-18	-40
EI	-28	-36	-28	-43	-31	-48	-25	-45	-31	-51	-20	-41
VE	-04	-26	-07	-38	-08	-50	-08	-46	-13	-49	-09	-49
R9	39		45		48		43		44		43	
Navy Selector Composites												
GT	-11	-29	-18	-43	-26	-58	-21	-52	-18	-51	-22	-54
MECH	-25	-36	-31	-49	-26	-53	-29	-53	-33	-56	-24	-51
ELEC	-27	-37	-34	-50	-40	-63	-34	-57	-34	-57	-30	-57
CLER	-17	-30	-20	-41	-19	-45	-22	-47	-23	-49	-23	-45
AM	-19	-33	-26	-46	-26	-56	-22	-51	-26	-53	-19	-51
BE/E	-18	-32	-30	-48	-36	-61	-30	-55	-27	-54	-27	-55
BT/EN-MM	-28	-37	-37	-51	-29	-51	-32	-54	-35	-54	-29	-51
CT	-18	-32	-23	-44	-25	-54	-25	-52	-24	-52	-27	-54
HM	-14	-30	-23	-45	-27	-57	-24	-52	-25	-53	-20	-53
MR	-28	-38	-35	-51	-31	-57	-33	-56	-34	-56	-29	-55
SUB	-21	-33	-29	-47	-33	-60	-28	-54	-28	-54	-25	-55
ELEC Comp	-26	-37	-32	-49	-36	-60	-31	-55	-33	-55	-26	-53
AFQT	-17	-31	-20	-43	-23	-57	-24	-53	-22	-52	-22	-54

Notes: Decimal points have been omitted from correlations
 r_u = uncorrected validity; r_c = Corrected validity.

Table A-12 (continued)

Rating	FTG		FTG		RM		RM		RM		RM	
School	6404		6413		6372		606J		606K		6352	
Composites Used	ELEC, SUB, VE		ELEC, SUB, VE		ELEC, CLER, BT/EN/MM		CLER, SUB, VE		CLER, SUB, VE		CLER, SUB, VE	
Criterion	TIME		TIME		TIME		TIME		TIME		TIME	
N	57		159		57		156		58		162	
Predictor	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests												
GS	-10	-23	08	-22	-09	-47	-07	-25	05	01	-12	-33
AR	-24	-46	-11	-33	-47	-70	-31	-53	-12	-14	-35	-59
WK	00	-23	02	-22	-18	-45	-09	-36	02	-03	-10	-41
PC	-08	-27	00	-22	-24	-42	-25	-44	-05	-08	-07	-35
NO	-39	-49	-22	-31	-18	-26	-26	-21	05	06	-19	-15
CS	-31	-39	-13	-24	-42	-55	-21	-21	01	01	-20	-27
AS	-13	-22	-12	-30	-12	-40	-14	-30	04	-01	-05	-28
MK	-25	-47	-24	-41	-42	-66	-35	-50	-06	-07	-36	-53
MC	-42	-54	-10	-27	-19	-45	-29	-52	02	-03	-30	-57
EI	-19	-39	-04	-28	-34	-59	-21	-35	-04	-07	-30	-51
VE	-12	-33	00	-24	-25		-17	-42	-04	-08	-11	-43
R ⁹	63		35		67		53		20		53	
Navy Selector Composites												
GT	-24	-46	-07	-32	-45	-69	-31	-54	-11	-12	-31	-58
MECH	-32	-47	-11	-32	-22	-52	-28	-51	02	-04	-22	-53
ELEC	-25	-47	-17	-38	-50	-72	-42	-60	-09	-11	-46	-65
CLER	-43	-56	-18	-34	-41	-59	-33	-42	02	00	-26	-40
AM	-38	-53	-06	-29	-27	-56	-31	-54	00	-05	-29	-57
BE/E	-23	-46	-21	-44	-46	-70	-39	-57	-08	-10	-41	-62
BT/EN/MM	-27	-47	-26	-42	-39	-65	-34	-51	00	-04	-30	-53
CT	-44	-58	-19	-37	-49	-69	-38	-54	-03	-06	-35	-56
YM	-13	-41	-11	-35	-38	-66	-31	-51	-03	-07	-32	-56
MR	-42	-56	-15	-36	-35	-63	-34	-56	-01	-06	-31	-57
SUB	-41	-55	-10	-34	-44	-68	-37	-58	-05	-09	-37	-61
ELEC Comp	-19	-44	-15	-37	-44	-69	-36	-54	-04	-07	-42	-62
AFQT	-30	-49	-12	-34	-43	-67	-36	-56	-03	-07	-35	-59

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity.

Table A-12 (continued)

Rating	STS		STS		STS	
School	606M		606N		6277	
Composites	ELEC,		ELEC,		ELEC,	
Used	SUB,VE		SUB,VE		SUB,VE	
Criterion	TIME		TIME		TIME	
<u>N</u>	66		322		112	
Predictor	r_u	r_c	r_u	r_c	r_u	r_c
ASVAB Tests						
GS	-14	-13	-13	-54	-23	-57
AR	-27	-49	-34	-65	-20	-57
WK	-04	-36	-13	-46	05	-30
PC	03	-16	-19	-43	-17	-47
NO	-20	-23	-18	-15	-15	-27
CS	-14	-13	-33	-37	-17	-19
AS	00	-20	-25	-50	-15	-38
MK	-21	-47	-30	-64	-30	-63
MC	-17	-40	-16	-46	-17	-44
EI	-20	-44	-30	-06	-27	-56
VE	-02	-34	-15	-47	-08	-43
	46		56		48	
Navy Selector Composites						
GT	-20	-47	-32	-65	-18	-57
MECH	-09	-38	-27	-58	-20	-52
ELEC	-29	-52	-43	-71	-41	-69
CLER	-19	-31	-32	-44	-21	-41
AM	-14	-42	-20	-54	-17	-51
BE/E	-24	-50	-36	-68	-35	-66
BT/EN/MM	-15	-43	-39	-68	-33	-64
CT	-24	-43	-39	-61	-25	-53
HM	-13	-45	-29	-65	-31	-64
MR	-20	-46	-35	-66	-24	-57
SUB	-23	-49	-32	-65	-23	-59
ELEC Comp	-22	-49	-38	-69	-42	-69
AFQT	-35	-64	-35	-64	-18	-55

Notes. Decimal points have been omitted from correlations
 r_u = Uncorrected validity; r_c = Corrected validity.

APPENDIX B

**CORRELATIONS BETWEEN CURRENT ASVAB SELECTOR COMPOSITES
AND MOST VALID ALTERNATE COMPOSITES**

Table B-1

Correlations Between Operational Selector Composites
and Most Valid Alternate Composites for
"A" Schools With FSG Criterion

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation						
		N	r_u	r_c		r_u	r_c					
VE+AR												
ABE	6513	72	41	56	MC+MK+AS	56	66					
					MK+AS	54	64					
					MK+EI+GS+AS	53	64					
					MK+EI+AS	53	63					
					VE+MK+MC+GS	52	63					
					MK+MC+EI	52	63					
					AR+MC+AS	52	62					
					VE+AR+AS	51	63					
					AR+MK+MC	51	63					
					MC+GS+2AS	51	61					
					ABF	6512	96	38	50	MK+EI+GS+AS	49	58
										AR+EI+GE	48	57
										MC+GS+2AS	47	56
AR+MK+EI+GS	47	56										
AR+VE+AS	46	56										
AR+MC+AS	46	56										
AR+VE+AS	46	56										
MK+EI+AS	45	54										
MK+EI+GS	45	55										
VE+MC+AS	44	54										
ABH	6527	69	42	54	NO+EI+MC+AS	61*	68					
					MK+EI+AS	61*	68					
					VE+MC+AS	60*	67					
					MK+EI+GS+AS	60*	67					
					MC+GS+2AS	59	66					
					NO+VE+MC+AS	59*	66					
					AR+EI+MC	58*	66					
					AR+EI+GS	57*	65					
					AR+MC+AS	57*	65					
					AR+VL+AS	57**	65					

Table B-1 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
VE+AR (Continued)							
CTR	6301	140	50	59	VE+MK	53	60
					CS+VE+AR	52	60
					CS+AR+MC+MK	50	58
					VE+MK+GS	49	57
					VE+AR+NO+CS	49	57
					AR+2MK+GS	49	57
CTT	6302	259	60	68	None More Valid		
					AR+MK	59	67

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-1 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
VE+AR (Continued)							
CTT	6320	63	44	53	AR+2MK+GS	59	67
					CS+AR+MC+MK	59	67
					CS+AR+MC+AS	56	63
					CS+AR+MC+MK	56	63
					MK+AS	52	59
					AR+MK	50	58
					CS+VE+AR	50	58
					MC+MK+AS	50	58
					AR+MK+MG	50	58
					AR+MC+AS	49	57
					VE+AS+NO+CS	49	57
					AR+2MK+GS	48	56
					VE+MK	28	42
					CS+AR+MC+MK	26	41
DP	6167	373	23	39	VE+MK+GS	25	40
					AR+2MK+GS	25	40
					MK+EI	25	39
					AR+MK	24	40
					AR+MK+EI+GS	24	39
					AR+MK+MC	24	39
					CS+VE+AR	24	39
					NO+CS+VE+AS	24	39
					AR+MK+EI+GS	48	57
					AR+2MK+GS	46	56
					VE+AR+MC	46	56
					AR+EI+GS	46	56
					WK+AR	46	56
					VE+MK+MC+GS	46	56
NS	6125	1581	47	57	CS+AR+MC+MK	57**	62
QM	6001	473	47	54			

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-1 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
VE+AR (Continued)							
					AR+MK+MC	55**	61
					AR+MK	54**	59
					AR+MK+AS	53**	59
					AR+2MK+GS	52*	58
					CS+AR+MC+AS	52	58
					AR+MC	51	57
					MC+MK+AS	50	56
					VE+AR+MC	50	56
					CS+VE+AR	50	56
SH	6477	595	19	32	VE+MK	28***	38
					MK+EI	25	35
					VE+MK+GS	23	35
					AR+2MK+GS	22	34
					MK+EI+GS	22	33
					AR+MK+EI+GS	22	33
					AR+MK	20	32
					VE+MK+MC+GS	20	32
					MK+AS	20	31
					MK+EI+AS	20	31
SM	6005	377	32	50	VE+AR+NO+CS	43***	56
					CS+VE+AR	40***	55
					CS+AR+MC+MK	40**	55
					NO+CS+VE+AS	38	51
					VE+NO+CS	38	51
					WK+NO+CS	37	50
					AR+MK	35	51
					AR+2MK+GS	34	51
					AR+MK+MC	34	51
					CS+AR+MC+AS	34	51

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities
marked with asterisks are significantly greater than operational
composite validities: * $p < .05$, ** $p < .01$

Table B-1 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation						
		N	r_u	r_c		r_u	r_c					
VE+MC+AS												
BU	6286	203	43	67	AR+MC+AS	49	70					
					MC+MK+AS	49	70					
					CS+AR+MC+AS	47	69					
					AR+MC	47	68					
					AR+MK+MC	47	67					
					VE+AR+MC	45	68					
					AR+EI+MC	45	67					
					CS+AR+MC+MK	45	66					
					AR+MK+AS	44	66					
					MK+MC+EI	43	66					
					CM	6291	79	23	37	CS+AR+MC+AS	36	45
										AR+MC+AS	34*	43
										AR+MC	30	41
AR+EI+MC	29	40										
AR+MK+AS	28	40										
MC+GS+2AS	28	40										
MC+MK+AS	27	39										
CS+AR+MC+MK	27	39										
AR+VE+AS	26	38										
AR+MK+MC	25	37										
EO	6292	181	22	36	AR+MK+AS	34	44					
					AR+MK+MC	33	43					
					AR+2MK+GS	33	42					
					AR+MK	32	41					
					MK+AS	31	41					
					MC+MK+AS	31	41					
					AR+MK+EI+GS	29	40					
					CS+AR+MC+MK	29	39					
					AR+VE+AS	28	40					
					VE+MK+MC+GS	28	40					

Table B-1 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
VE+MC+AS (Continued)							
GMT	6025	99	48	71	VE+AR+MC	53	73
					VE+MK+MC+GS	52	73
					NO+VE+MC+AS	51	73
					VE+MC	50	72
					AR+VE+AS	50	72
					VE+MK+GS	50	71
					AR+MK+EI+GS	50	71
					AR+EI+GS	50	71
					WK+AR	50	70

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-1 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
VE+MC+AS (Continued)							
HT	6106	53	13	25	CS+VE+AR	50	67
					CS+AR+MC+AS	23	31
					MC+GS+2AS	22	30
					AR+MC+AS	20	29
					AR+MC	17	27
					AR+EI+MC	16	27
					MC+MK+AS	14	26
					CS+AR+MC+MK	14	25
					AR+EI+GS	14	25
					WK+MC+AS	13	25
HT	6119	390	34	59	MK+EI+GS+AS	12	24
					AR+MK+EI+GS	42*	63
					MK+EI+GS+AS	42*	63
					MK+EI+GS	42*	62
					VE+MK+MC+GS	40	62
					VE+MK+GS	40	61
					MK+EI	40	61
					AR+EI+GS	40	61
					MK+EI+AS	40	61
					AR+2MK+GS	39	59
HT	6120	297	30	54	MK+MC+EI	38	61
					AR+VE+AS	36	56
					VE+AR+MC	35	56
					CS+AR+MC+AS	35	56
					AR+MK+AS	35	56
					NO+VE+MC+AS	34	56
					AR+MK+EI+GS	34	55
					GS+AR+MC+MK	34	53
					AR+MC+AS	33	55
					AR+MK+MC	33	54
SW	6288	85	20	31	VE+AR	33	53
					CS+AR+MC+AS	23	32
					VE+MC	20	30
					MC+MK+AS	19	30
					CS+AR+MC+MK	19	29

Table B-1 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
VE+MC+AS (Continued)							
UT	6290	77	15	23	AR+2MK+GS	45*	48
					AR+MK+AS	43**	45
					AR+MK	42*	45
					MK+EI	41*	44
					MK+AS	41**	43
					AR+MK+EI+GS	40*	43
					MK+EI+AS	39**	41
					VE+MK	38*	41
					AR+MK+MC	36*	39
					MK+EI+GS	35	39

Notes. Decimal points have been omitted from correlations.

r_u = Uncorrected validity; r_c = Corrected validity. Validities

marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-1 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation						
		N	r_u	r_c		r_u	r_c					
bsk												
AR+MK+EI+GS												
DS	6131	118	32	57	CS+AR+MC+MK	45*	63					
					AR+MK+MC	44*	62					
					AR+2MK+GS	42*	61					
					AR+MK+AS	41	61					
					VE+MK	38	59					
					MK+EI	36	58					
					MK+AS	35	57					
					CS+VE+AR	34	57					
					MK+MC+EI	34	57					
					VE+AR+NO+CS	31	54					
					FTG	6376	117	45	72	AR+MK+MC	54	75
										MC+MK+AS	52	74
										MK+MC+EI	51	74
AR+2MK+GS	50	74										
VE+MK+MC+GS	48	73										
MK+AS	48	72										
AR+MK+AS	47	72										
AR+MK	46	72										
CS+AR+MC+MK	46	71										
FTG	6377	245	32	57						MC+MK+AS	37	59
					VE+MK+MC+GS	36	58					
					AR+MK+MC	36	58					
					NO+VE+MC+AS	36	57					
					CS+AR+MC+MK	35	58					
					AR+MK+AS	35	58					
					VE+AR+MC	35	58					
					MK+AS	34	57					
					CS+AR+MC+AS	34	56					
					AR+MC+AS	33	56					

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-1 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
AR+MK+EI+GS (Continued)							
FTM	6027	172	52	80	VE+MK	53	79
					MK+EI	52	79
FTM	6108	134	42	68	AR+MK+AS	51	79
					AR+MK+AS	47	70
					VE+MK	46	70
					MK+AS	46	69
					AR+2MK+GS	45	69
					AR+MK+MC	44	69
					AR+MK	44	68
					CS+AR+MC+MK	44	68
					VE+MK+GS	42	68
					VE+MK+MC+GS	42	68
					NC+MK+AS	42	67
SWS	6146	187	41	67	MK+MC+EI	42	67
					AR+MK+MC	40	66
VE+NO+CS							
CTA	6020	107	23	37	CS+VE+AR	31	42
					VE+AR+MC	28	38
					VE+AR+NO+CS	27	39
					AR+MK+MC+CS	27	39
					VE+MC	27	36
					CS+AR+MC+AS	26	38
					WK+AR	26	37
					VE+AR	26	37
					AR+MC	26	35
					VE+MK+MC+GS	23	33

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-1 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
AR+2MK+GS							
CE	6289	126	24	37	NO+VE+MC+AS	37	45
					AR+MC	36	45
					VE+AR+MC	36	45
					AR+MC+AS	35	44
					CS+AR+MC+AS	35	44
					VE+MC	34	43
					AR+MK+MC	34	43
					MC+MK+AS	34	43
					WK+MC+AS	34	42
					VE+MC+AS	33	41
					EM	6070	369
AR+EI+MC	39	47					
AR+EI+GS	39	47					
MK+MC+EI	39	47					
MK+EI+GS	38	46					
CS+AR+MC+MK	38	46					
MK+EI	38	46					
AR+MK+MC	36	45					
AR+MK+AS	36	44					
MK+EI+AS	36	44					
TM	6036	219	35	47			
					AR+MC+AS	46*	55
					AR+MC	46*	55
					CS+AR+MC+AS	44	54
					AR+EI+MC	44	54
					AR+MK+MC	43**	53
					AR+VE+AS	42	52
					MC+MK+AS	41	51
					VE+MC+AS+NO	41	51

Table B-1 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
AR+2MK+GS (Continued)							
TMT	6093	202	25	39	NO+VE+AS	38	47
					NO+VE+MC+AS	38*	47
					VE+MK+MC+GS	35*	46
					AR+VE+AS	34	45
					MK+EI+GS+AS	34	45
					VE+MC+AS	34	44
					MC+GS+2AS	34	43
					WK+MC+AS	33	43
					NO+CS+VE+AS	33	43
					NO+EI+MC+AS	33	43
AR+MC+AS							
MR	6068	194	48	67	MC+MK+AS	50	68

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities
marked with asterisks are significantly greater than operational
composite validities: * $p < .05$, ** $p < .01$

Table B-1 (Continued)

Rating Code	Course Code	Selector Composite Correlation N	Selector Composite		Alternate Composite	Correlation	
			r_u	r_c		r_u	r_c
AR+MK+EI+GS, MK+AS							
GSE/GSM	8563	117	<u>AR+MK+EI+GS</u>		MK+EI	52	77
			46	75	MK+EI+GS	49	76
			<u>MK+AS</u>		MK+EI+AS	49	76
			47	74	MK+MC+EI	47	75
					MK+EI+GS+AS	46	75
					VE+MK	46	74
					MC+MK+AS	46	74
					AR+2MK+GS	45	74
					VE+MK+GS	45	74
			GSM	8564	84	<u>AR+MK+EI+GS</u>	
36	63	MC+MK+AS				40	65
<u>MK+AS</u>		MK+EI+GS				38	64
35	62	MK+EI+GS+AS				37	64
		MK+EI+AS				37	63
		AR+MK+MC				36	63
		MK+EI				36	63
		VE+MK+MC+GS				35	63
		VE+MK+AS				34	62
		AR+MK+AS				34	62
AR+2MK+GS, VE+AR+MC, VE							
TMS	6034	82	<u>AR+2MK+GS</u>		NO+EI+MC+AS	49	61
			27	49	NO+VE+MC+AS	48	62
			<u>VE+AR+MC</u>		CS+AR+MC+AS	47	61
			38	56	AR+MC+AS	44	59
			<u>VE</u>		MK+EI+GS+AS	42	58
			20	41	AR+EI+MC	42	58
					MK+EI+AS	42	57
					AR+VE+AS	41	57
					MC+MK+AS	40	57
					VE+MC+AS	40	56

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: *p .05, **p .01

Table B-2

Correlations Between Current ASVAB Selector Composites
and Most Valid Alternate Composites for
"A" Schools with a TIME Criterion

Rating Code	Course Code	Selector Composite			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
AR+MK+EI+GS							
AD	6501	880	-35	-50	AR+MK+AS	-38	-51
					CS+AR+MC+AS	-37	-50
					MK+AS	-36	-50
					CS+AR+MC+MK	-36	-50
					AR+MK+MC	-35	-49
					MC+MK+AS	-35	-49
					MK+EI+AS	-34	-49
					MK+EI+GS+AS	-34	-49
					VE+AR+AS	-34	-48
AQ	6240	475	-26	-43	AR+MC+AS	-34	-48
					VE+AS+NO+CS	-37***	-49
					CS+AR+MC+AS	-35***	-49
					VE+AR+NO+CS	-35*	-48
					NO+VE+MC+AS	-35*	-48
					CS+VE+AR	-34*	-48
					VE+NO+CS	-34	-46
					WK+NO+CS	-34	-46
					CS+AR+MC+MK	-33*	-47
AT	6239	1489	-24	-38	NO+EI+MC+AS	-31	-46
					VE+AR+MC	-30*	-46
					CS+AR+MC+MK	-31***	-42
					CS+AR+MC+AS	-30***	-42
					VE+AR+NO+CS	-30*	-41
					NO+CS+VE+AS	-30*	-40
					CS+VE+AR	-28	-40
					NO+EI+MC+AS	-27	-39
					NO+VE+MC+AS	-27	-39
WK+NO+CS	-27	-36					
AR+MK+MC	-26	-39					
AR+MK+AS	-26	-39					

Table B-2 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
AR+MK+EI+GS							
AX	6241	288	-28	-45	VE+AR+NO+CS	-38	-51
					CS+VE+AR	-38*	-51
					NO+CS+VE+AS	-36	-49
					CS+AR+MC+AS	-35	-49
					VE+NO+CS	-35	-46
					WK+NO+CS	-34	-45
					AR+MK+AS	-30	-47

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities
marked with asterisks are significantly greater than operational
composite validities: * $p < .05$, ** $p < .01$

Table B-2 (Continued)

Rating Code	Course Code	Selector Composite			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
AR+MK+EI+GS (Continued)							
EW	602A	400	-20	-39	AR+MK+MC	-30	-47
					VE+AR	-29	-46
					AR+MK	-29	-46
					CS+VE+AR	-31*	-45
					VE+AR	-29**	-44
					WK+AR	-29*	-44
					VE+AR+NO+CS	-29	-43
					AR+VE+AS	-28	-43
					NO+CS+VE+AS	-28	-42
					VE+NO+CS	-26	-39
					WK+NO+CS	-26	-39
EW	602D	408	-21	-41	NO+VE+AS	-25	-40
					CS+AR+MC+AS	-24	-40
					CS+VE+AR	-29	-44
					VE+AR+NO+CS	-28	-43
					AR+VE+AS	-27	-43
					VE+AR	-26	-43
					WK+AR	-26	-43
					NO+CS+VE+AS	-26	-41
					CS+AR+MC+AS	-25	-42
					AR+MK+AS	-24	-42
					WK+NO+CS	-24	-38
TD	6242	303	-23	-37	VE+NO+CS	-23	-37
					CS+AR+MC+MK	-31*	-42
					CS+AR+MC+AS	-30	-42
					AR+EI+MC	-28	-40
					MK+MC+EI	-28	-40
					NO+EI+MC+AS	-27	-39
					VE+AR+NO+CS	-26	-38
					NO+CS+VE+AS	-26	-38
					AR+MC	-26	-39
					MK+EI	-25	-39
					AR+MK+MC	-25	-39

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-2 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r _u	r _c		r _u	r _c
AR+2MK+GS							
IC	605Z	658	-32	-47	NO+CS+VE+AS	-40*	-50
					NO+VE+AS	-39*	-50
					VE+AR+NL+CS	-38	-50
					CS+AR+MC+AS	-38	-50
					NO+VE+MC+AS	-38	-50
					CS+AR+MC+MK	-37*	-50
					AR+MK+AS	-37*	-50
					CS+VE+AR	-36	-48
					NO+EI+MC+AS	-36	-48
					AR+VE+AS	-35	-48
MK+AS							
BT	6486	2085	-32	-39	VE+AR+NO+CS	-39**	-44
					CS+AR+MC+MK	-38**	-44
					CS+VE+AR	-38**	-43
					NO+CS+VE+AS	-37**	-42
					AR+MK+EI+GS	-36**	-42
					VE+MK	-36**	-42
					MK+EI	-36**	-42
					VE+NO+CS	-36	-41
					WK+NO+CS	-36	-41
					EN	6487	1258
NO+EI+MC+AS	-33**	-42					
NO+VE+AS	-33*	-42					
CS+AR+MC+AS	-33**	-42					
AR+MC+AS	-31	-41					
NO+CS+VE+AS	-31	-41					
VE+MC+AS	-30	-40					
AR+VE+AS	-30	-40					
MC+MK+AS	-30	-40					
VE+AR+MC	-29	-39					
AR+2MK+GS	-26	-34					
AR+MK+MC	-26	-34					
VE+NO+CS	-26	-32					

Table B-2 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
MK+AS (Continued)							
MM	6492	2598	-25	-33	VE+AR+NO+CS	-29*	-36
					CS+VE+AR	-29*	-36
					CS+AR+MC+MK	-29**	-36
					AR+MK+EI+GS	-27	-35
					CS+AR+MC+AS	-27	-35
					AR+MK+AS	-27**	-35
					NO+CS+VE+AS	-27	-34

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities
 marked with asterisks are significantly greater than operational
 composite validities: * $p < .05$, ** $p < .01$

Table B-2 (Continued)

Rating Code	Course Code	Selector Composite Correlation N	Selector Composite Correlation		Alternate Composite	Correlation	
			r_u	r_c		r_u	r_c
AR+MK+EI+GS, VE+NO+CS, VE+AR+MC, VE							
RM	606D	302	<u>AR+MK+EI+GS</u>		AR+MK	-38	-57
			-27	-52	CS+AR+MC+MK	-36	-56
			<u>VE+NO+CS</u>		AR+2MK+GS	-35	-55
			-35	-49	CS+VE+AR	-34	-54
			<u>VE+AR+MC</u>		WK+NO+CS	-34	-48
			-19	-47	VE+MK	-30	-53
					AR+MK+MC	-30	-53
			<u>VE</u>		NO+CS+VE+AS	-30	-53
			-09	-36	AR+MK+AS	-30	-37
					VE+AR	-26	-50

Notes. Decimal points have been omitted from correlations;
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-3

Correlations Between Current ASVAB Selector Composites
and Most Valid Alternate Composites for
BE/E Schools with a TIME Criterion

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
VE+AR							
MN	606G	58	-20	-38	CS+AR+MC+MK	-58***	-64
					AR+MK+AS	-56***	-62
					AR+MK+MC	-56***	-62
					AR+MK	-55*	-56
					CS+VE+AR	-53*	-60
					CS+AR+MC+AS	-53***	-59
					VE+AR+NO+CS	-53*	-58
					AR+MC	-51***	-57
					VE+AR	-50*	-58
					AR+VE+AS	-49***	-55
AR+MK+EI+GS							
AQ	6231	794	-47	-71	CS+AR+MC+MK	-53***	-73
					AR+MK+MC	-52***	-73
					AR+MK	-50	-72
					AR+2MK+GS	-49	-72
					AR+MK+AS	-48	-71
					MK+MC+EI	-46	-70
					MK+EI	-46	-70
AT	6230	2245	-50	-69	CS+AR+MC+MK	-54***	-71
					AR+MK+MC	-52*	-70
					AR+MK+AS	-51	-69
					MK+EI	-51	-70
					MK+MC+EI	-51	-69
					AR+MK	-50	-69
					AR+2MK+GS	-50	-69

Table B-3 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
AR+MK+EI+GS (Continued)							
AX	6232	449	-50	-73	AR+MK+MC	-55*	-75
					CS+AR+MC+MK	-54	-75
					AR+MK+AS	-53	-74
					AR+MK	-52	-74
					MK+MC+EI	-52	-74
					AR+2MK+GS	-50	-73
					MK+EI	-50	-73
					MC+MK+AS	-49	-72

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities
 marked with asterisks are significantly greater than operational
 composite validities: * $p < .05$, ** $p < .01$

Table B-3 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
AR+MK+EI+GS (Continued)							
CMT	6308	275	-29	-57	CS+AR+MC+MK	-37	-60
					CS+AR+MC+AS	-35	-58
					AR+MK+MC	-31	-57
					VE+AR+MC	-31	-57
					AR+EI+MC	-30	-56
					AR+MK+AS	-29	-57
					AR+MC	-29	-55
					CS+VE+AR	-29	-53
					MK+MC+EI	-28	-56
					NO+CS+VE+AS	-28	-50
DS	6269	226	-43	-69	CS+AR+MC+MK	-45	-69
					AR+MK+MC	-42	-68
DS	6309	129	-29	-51	CS+AR+MC+AS	-40	-57
					CS+AR+MC+MK	-39	-56
					AR+EI+MC	-34	-54
					AR+MK+AS	-34	-53
					NO+CS+VE+AS	-33	-51
					CS+VE+AR	-33	-52
					VE+AR+NO+CS	-33	-52
					AR+MC	-33	-53
					AR+MK+MC	-32	-52
					NO+EI+MC+AS	-31	-51
DS	6366	151	-29	-57	NO+EI+MC+AS	-37	-56
					MK+MC+EI	-35	-55
					AR+EI+MC	-33	-54
					NO+VE+MC+AS	-31	-52
					CS+AR+MC+MK	-31	-53
					MK+EI	-30	-53
					AR+MK+MC	-30	-53
					MC+MK+AS	-30	-52
					MK+EI+GS	-29	-53
					MK+EI+GS+AS	-29	-53
ET	6403	958	-36	-64	CS+AR+MC+MK	-37	-63
					AR+MK+AS	-37	-64

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-3 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
AR+MK+EI+GS (Continued)							
ET	6409	511	-35	-61	AR+MK+MC	-36	-63
					MK+EI	-35	-63
					CS+AR+MC+MK	-38	-62
					MK+EI	-36	-61
					MK+MC+EI	-35	-61
					AR+MK+MC	-35	-61
					AR+MK+AS	-34	-61
					NO+EI+MC+AS	-34	-59
					CS+AR+MC+AS	-34	-59
ET	6414	928	-36	-58	MK+EI+AS	-34	-60
					CS+AR+MC+MK	-39	-59
					AR+MK+MC	-38	-59
					MK+MC+EI	-37	-59
					MK+EI	-37	-58
					AR+2MK+GS	-36	-58
					AR+MK+AS	-36	-57
					AR+MK	-35	-57
					MC+MK+AS	-35	-57
EW	6254	68	-30	-50	CS+AR+MC+AS	-48*	-60
					AR+MC+AS	-44	-57
					NO+EI+MC+AS	-43	-57
					NO+VE+MC+AS	-43	-57
					NO+CS+VE+AS	-40	-53
					NO+VE+AS	-40	-54
					AR+MK+AS	-39	-54
					MC+GS+2AS	-39	-54
					AR+MC	-37	-53
					CS+AR+MC+MK	-37	-53
EW	6275	166	-47	-77	CS+AR+MC+MK	-52	-76
					VE+AR+NO+CS	-50	-74
					CS+AR+MC+AS	-49	-75
					CS+VE+AR	-47	-74
					AR+MK+AS	-47	-76
					NO+CS+VE+AS	-47	-70

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-3 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
AR+MK+EI+GS (Continued)							
EW	6306	550	-41	-67	AR+MK	-46	-76
					AR+MK+AS	-63***	-70
					CS+AR+MC+MK	-48*	-70
					AR+MK	-47*	-69
					AR+MK+MC	-47*	-69
					MK+AS	-45	-68
					AR+2MK+GS	-45*	-68
					CS+AR+MC+AS	-42	-65
					MC+MK+AS	-42	-66
					FTG	6248	415
AR+MK+AS	-46	-65					
MK+AS	-45	-64					
AR+MK+MC	-45	-64					
MK+EI	-43	-63					
MK+EI+AS	-43	-63					
AR+MK	-43	-63					
MK+MC+EI	-43	-63					
MC+MK+AS	-43	-63					
AR+2MK+GS	-41	-62					
FTG	6310	221	-36	-60	CS+AR+MC+MC	-45*	-65
					CS+VE+AR	-42	-62
					VE+AR+NO+CS	-40	-59
					CS+AR+MC+AS	-38	-59
					AR+MK+MC	-38	-61
					WK+NO+CS	-36	-50
					AR+MK	-36	-60
					NO+CS+VE+AS	-35	-53
					AR+MK+AS	-35	-60
					VE+NO+CS	-35	-60
FTG	6359	220	-38	-66	CS+AR+MC+MK	-41	-66
					AR+MK+AS	-40	-66
					AR+2MK+GS	-39	-66
					AR+MK	-38	-65

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-3 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
AR+MK+EI+GS (Continued)							
FTM	6249	284	-39	-65	AR+MK+MC	-38	-65
					MK+MC+EI	-49**	-69
					MK+EI	-48**	-69
					CS+AR+MC+MK	-46	-67
					AR+MK+MC	-46*	-68
					MC+MK+AS	-46	-67
					MK+EI+AS	-45	-67
					AR+MK+AS	-45	-67
					MK+AS	-45	-67
					AR+MK	-41	-65
FTM	6311	140	-44	-77	CS+AR+MC+AS	-39	-62
					CS+AR+MC+MK	-46	-76
					VE+MK	-45	-77
					AR+2MK+GS	-45	-77
					MK+EI	-45	-77
					AR+MK	-45	-77
					AR+MK+AS	-43	-76
					AR+MK+MC	-43	-76
FTM	6358	166	-38	-64	MK+EI	-44	-67
					AR+2MK+GS	-40	-65
					AR+MK	-39	-65
					MK+AS	-39	-64
					MK+EI+AS	-38	-64
					MK+EI+GS	-37	-64
					AR+MK+AS	-37	-64
GMC	6370	369	-40	-57	AR+MK+MC	-49**	-62
					CS+AR+MC+MK	-45	-60
					AR+2MK+GS	-44	-60
					MK+MC+EI	-44	-60
					AR+MK	-44	-59
					MC+MK+AS	-42	-58
					VE+MK+MC+GS	-42	-58
					AR+MK+AS	-42	-58
					MK+EI	-41	-58

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-3 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
AR+MK+EI+GS (Continued)							
GMM	6368	264	-34	-63	AR+MC	-40	-57
					CS+AR+MC+MK	-42	-64
					AR+MK+AS	-41	-65
					AR+MK	-38	-63
					AR+2MK+GS	-38	-63
					CS+AR+MC+AS	-38	-60
GMT	6369	224	-41	-52	AR+MK+MC	-37	-62
					CS+AR+MC+MK	-47	-56
					AR+2MK+GS	-44	-54
					AR+MK+MC	-44	-54
					AR+MK	-44	-54
					AR+MK+AS	-42	-53
					VE+AR+NO+CS	-42	-51
					VE+MK	-41	-52
					MK+EI	-41	-52
					MK+MC+EI	-41	-52
STG	6276	149	-20	-42	CS+AR+MC+AS	-41	-51
					CS+AR+MC+AS	-38*	-51
					MC+MK+AS	-38**	-51
					CS+AR+MC+MK	-38**	-51
					MK+AS	-36**	-50
					NO+VE+MC+AS	-36**	-50
					NO+CS+VE+AS	-36	-48
					NO+EI+MC+AS	-35	-50
					AR+MK+AS	-33	-58
					NO+VE+AS	-31	-46
					MK+EI+AS	-31	-47
					AR+MK+MC	-54*	-73
TD	6233	430	-48	-70	CS+AR+MC+MK	-53	-72
					AR+MK	-51	-71
					AR+2MK+GS	-50	-71
					AR+MK+AS	-49	-70
					MK+MC+EI	-48	-70
					MK+EI	-47	-70

Notes. Decimal points have been omitted from correlations.

r_u = Uncorrected validity; r_c = Corrected validity. Validities

marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-3 (Continued)

Rating Code	Course Code	Selector Composite Correlation N	Selector Composite		Alternate Composite	Correlation	
			r_u	r_c		r_u	r_c
AR+2MK+GS (Continued)							
AE	6235	1606	-40	-56	CS+AR+MC+MK	-47**	-60
					AR+MK+AS	-45**	-59
					AR+MK+MC	-44**	-58
					CS+AR+MC+AS	-43	-56
					MK+MC+EI	-42	-56
					MK+AS	-42	-57
					MC+MK+AS	-42	-56
					MK+EI+AS	-41	-55
					MK+EI	-41	-56
					AR+MK	-41	-57
ASE	6237	120	-49	-63	CS+AR+MC+MK	-58*	-68
					AR+MK+MC	-52	-64
					MK+MC+EI	-51	-63
					AR+MK+EI+GS	-51	-64
					CS+AR+MC+AS	-50	-60
					MK+EI	-50	-63
					MK+EI+GS	-49	-62
VE+MK+MC+GS	-48	-62					
CE	6259	65	-45	-62	CS+AR+MC+MK	-49	-64
					CS+VE+AR	-49	-63
					VE+AR+NO+CS	-48	-62
					AR+MK+EI+GS	-44	-61
CE	6270	148	-26	-42	AR+MK	-44	-61
					AR+MK+MC	-31	-45
					AR+MK+MC	-26	-42
CE	6307	291	-36	-55	CS+AR+MC+MK	-25	-42
					MK+EI	-43	-58
					AR+MK+AS	-42	-58
					CS+AR+MC+MK	-42	-58
					MK+MC+EI	-42	-57
					AR+MK+EI+GS	-41	-58
					MK+EI+AS	-41	-57
					AR+MK+MC	-41	-57
AR+EI+MC	-40	-56					

Notes. Decimal points have been omitted from correlations.
 r_u = uncorrected validity; r_c = corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-3 (Continued)

Rating Code	Course Code	Selector Composite			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
AR+2MK+GS (Continued)							
EM	6258	490	-39	-55	CS+AR+MC+AS	-39	-54
					VE+AR+MC	-39	-55
					CS+AR+MC+MK	-43*	-58
					AR+MK	-40	-55
					AR+MK+MC	-39	-55
EM	6273	269	-61	-70	VE+AR+NO+CS	-38	-54
					AR+MK+MC	-62	-71
					CS+AR+MC+MK	-62	-71
EM	6303	164	-27	-46	AR+MK	-60	-70
					CS+AR+MC+MK	-41*	-54
					VE+AR+NO+CS	-39	-52
					CS+AR+MC+AS	-38	-50
					NO+CS+VE+AS	-37	-48
					CS+VE+AR	-36	-50
					AR+MK+AS	-36	-51
					AR+MK	-34	-50
					AR+MK+MC	-34	-50
					WK+NO+CS	-33	-45
					VE+NO+CS	-33	-45
IC	6274	600	-42	-59	CS+AR+MC+MK	-44	-59
					AR+MK+EI+GS	-43	-59
					AR+MK+AS	-42	-58
IC	6315	66	-48	-67	AR+MK	-42	-58
					VE+MK	-52	-69
					MK+AS	-50	-67
					MK+EI	-50	-68
					AR+MK+AS	-50	-68
					AR+MK	-49	-68
					AR+MK+MC	-48	-67
					MK+MC+EI	-47	-66
					MC+MK+AS	-47	-65
MK+EI+AS	-47	-65					
IC	6367	89	-24	-38	NO+CS+VE+AS	-41	-49
					MK+AS	-40	-49

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-3 (Continued)

Rating Code	Course Code	Selector Composite Correlation			Alternate Composite	Correlation	
		N	r_u	r_c		r_u	r_c
AR+2MK+GS (Continued)							
					MK+EI+AS	-38	-47
					NO+VE+AS	-37	-46
					NO+EI+MC+AS	-35	-45
					AR+MK+AS	-34	-44
					VE+NO+CS	-34	-43
					MK+EI	-34	-44
					WK+NO+CS	-33	-42
					NO+VE+MC+AS	-32	-43
TMT	6318	256	-38	-61	CS+AR+MC+MK	-47*	-65
					AR+MK	-46***	-64
					VE+AR+NO+CS	-44	-59
					CS+VE+AR	-43	-60
					AR+MK+MC	-39	-61
					AR+MK+AS	-39	-60
TMT	6551	101	-48	-71	CS+AR+MC+MK	-56	-75
					AR+MK	-54	-74
					AR+MK+MC	-54	-74
					AR+MK+AS	-47	-71

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-3 (Continued)

Rating Code	Course Code	Selector Composite	Correlation		Alternate Composite	Correlation	
			N	r_u r_c		r_u	r_c
VE+AR, AR+MK+EI+GS, VE+MC+AS							
EM	605R	592	<u>VE+AR</u>		NO+EI+MC+AS	-36**	-44
			-11	-29	MK+MC+EI	-31	-40
			<u>AR+MK+EI+GS</u>		AR+EI+MC	-31	-40
			-27	-37	NO+VE+MC+AS	-31	-40
			<u>VE+MC+AS</u>		MK+EI+GS+AS	-30	-40
			-25	-36	CS+AR+MC+AS	-30	-39
					MK+EI	-29	-39
		MC+MK+AS	-29	-39			
		AR+MC+AS	-28	-38			
		AR+MK+AS	-28	-38			
EM	605U	1109	<u>VE+AR</u>		CS+AR+MC+AS	-39*	-53
			-18	-43	AR+MK+AS	-39	-53
			<u>AR+MK+EI+GS</u>		NO+EI+MC+AS	-38	-52
			-34	-50	MC+MK+AS	-38	-52
			<u>VE+MC+AS</u>		MK+MC+EI	-38	-52
			-31	-49	MK+EI+AS	-38	-52
					MK+AS	-37	-51
					CS+AR+MC+MK	-37	-52
					AR+EI+MC	-36	-51
					AR+MK+MC	-35	-51
EM	605V	272	<u>VE+AR</u>		MK+MC+EI	-40	-61
			-26	-58	CS+AR+MC+MK	-40	-63
			<u>AR+MC+EI+GS</u>		MK+EI	-40	-60
			-40	-63	AR+EI+MC	-39	-62
			<u>VE+MC+AS</u>		AR+MK+MC	-39	-63
		-26	-53				
ET	6256	637	<u>VE+AR</u>		NO+EI+MC+AS	-38	-57
			-21	-52	CS+AR+MC+AS	-37	-58
			<u>AR+MK+EI+GS</u>		AR+MK+AS	-36	-58
			-34	-57	NO+VE+MC+AS	-36	-57
			<u>VE+MC+AS</u>		MK+EI+GS+AS	-34	-56
			-29	-53	MC+MK+AS	-34	-55
					AR+MC+AS	-33	-56
					MK+EI+AS	-33	-54
					CS+AR+MC+MK	-33	-56
					NO+VE+AS	-33	-56

Table B-3 (Continued)

Rating Code	Course Code	Selector Composite	Correlation		Alternate Composite	Correlation				
			N	r_u r_c		r_u	r_c			
VE+AR, AR+MK+EI+GS, VE+MC+AS (Continued)										
ET	6271	412	<u>VE+AR</u>		NO+EI+MC+AS	-41	-59			
			-18	-51	MK+EI+AS	-39	-57			
			<u>AR+MK+EI+GS</u>		MK+EI+GS+AS	-38	-58			
			-34	-57	NO+VE+MC+AS	-38	-59			
			<u>VE+MC+AS</u>		CS+AR+MC+AS	-36	-57			
			-33	-56	NO+VE+AS	-36	-58			
					AR+MK+AS	-36	-58			
					MK+AS	-35	-54			
					MK+MC+EI	-35	-56			
					MC+MK+AS	-35	-54			
			ET	6304	364	<u>VE+AR</u>		CS+AR+MC+AS	-38	-59
						-22	-54	CS+AR+MC+MK	-36	-59
<u>AR+MK+EI+GS</u>		AR+MK+AS				-34	-59			
-30	-57	NO+CS+VE+AS				-32	-53			
<u>VE+MC+AS</u>		CS+VE+AR				-31	-57			
-24	-51	NO+EI+MC+AS				-30	-51			
		MK+EI+AS				-30	-52			
		MK+AS				-29	-51			
		ARMCAS				-29	-55			
		AR+MK+MC				-29	-56			

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-3 (Continued)

Rating Code	Course Code	Selector Composite Correlation N	Composite		Alternate Composite	Correlation	
			r_u	r_c		r_u	r_c
AR+MK+EI+GS, MK+AS							
GSE	6372	57	<u>AR+MK+EI+GS</u>		CS+AR+MC+MK	-56	-75
			-50	-72	MC+EI	-55	-74
			<u>MK+AS</u>		CS+VE+AR	-52	-73
			-39	-65	AR+MK	-52	-73
					AR+MK+MC	-50	-72
					AR+MK+AS	-49	-71
					VE+AR+NO+CS	-49	-69
AR+MK+EI+GS, VE+AR+MC, VE							
STS	606M	66	<u>AR+MK+EI+MC</u>		AR+EI+MC	-32	-54
			-29	-52	CS+AR+MC+MK	-32	-53
			<u>VE+AR+MC</u>		MK+EI	-31	-53
			-23	-49	AR+MK+MC	-30	-53
			<u>VE</u>		AR+MC	-29	-51
		-02	-34	MK+MC+EI	-29	-52	
STS	606N	322	<u>AR+MK+EI+GS</u>		CS+AR+MC+MK	-46	-71
			-43	-71	CS+AR+MC+AS	-45	-69
			<u>VE+AR+MC</u>		AR+MK+AS	-44	-71
			-32	-65	MK+EI	-43	-71
			<u>VE</u>		MK+EI+AS	-43	-70
		-15	-47	CS+VE+AR	-42	-67	
STS	6277	112	<u>AR+MK+EI+GS</u>		MK+EI	-42	-69
			-41	-69	MK+EI+GS	-42	-69
			<u>VE+AR+MC</u>		MK+EI+GS+AS	-40	-68
			-23	-59			
		<u>VE</u>					
		-08	-43				
FTG	6404	57	<u>AR+MK+EI+GS</u>		CS+AR+MC+AS	-49	-61
			-25	-47	NO+EI+MC+AS	-48	-60

Notes. Decimal points have been omitted from correlations.

r_u = Uncorrected validity; r_c = Corrected validity. Validities

marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

Table B-3 (Continued)

Rating Code	Course Code	Selector Composite Correlation		Alternate Composite	Correlation	
		N	r_u		r_c	r_u
AR+MK+EI+GS, VE+AR+MC, VE (Continued)						
			<u>VE+AR+MC</u>	NO+VE+MC+AS	-47	-59
			-41 -55	CS+AR+MC+MK	-46	-59
			<u>VE</u>	MK+MC+EI	-45	-58
			-12 -33	AR+EI+MC	-44	-57
				NO+CS+VE+AS	-44	-57
				AR+MC	-44	-57
				VE+AR+NO+CS	-44	-58
				VE+NO+CS	-43	-56
FTG	6413	159	<u>AR+MK+EI+GS</u>	MK+AS	-26	-42
			-17 -38	AR+MK+AS	-25	-42
			<u>VE+AR+MC</u>	CS+AR+MC+MK	-24	-41
			-10 -34	MK+EI	-24	-41
			<u>VE</u>	AR+MK+MC	-23	-41
			00 -24	MC+MK+AS	-23	-41
				MK+EI+AS	-23	-41
				AR+MK	-23	-41
				MK+MC+EI	-22	-40
				NO+EI+MC+AS	-21	-39
VE+NO+CS, VE+AR+MC, VE						
RM	606J	156	<u>VE+NO+CS</u>	CS+AR+MC+MK	-45	-62
			-33 -42	AR+MK+MC	-43	-61
			<u>VE+AR+MC</u>	AR+MK+EI+GS	-42	-60
			-37 -58	MK+MC+EI	-42	-60
			<u>VE</u>	MK+EI	-41	-57
			-17 -42	AR+MK+AS	-40	-58
				CS+AR+MC+AS	-40	-59
				AR+MK	-40	-58
				NO+VE+MC+AS	-39	-58
				AR+EI+MC	-39	-58

Table B-3 (Continued)

Rating Code	Course Code	Selector Composite Correlation N	Selector Composite		Alternate Composite	Correlation	
			r_u	r_c		r_u	r_c
VE+NO+CS, VE+AR+MC, VE (Continued)							
RM	606K	58	VE+NO+CS		AR+MK	-12	-14
			02	00	VE+AR	-11	-12
			VE+AR+MC		AR+MK+EI+GS	-09	-11
			-05	-09	MK+EI	-08	-11
			VE		AR+2MK+GS	-08	-10
			-04	-08	VE+MK	-08	-10
					CS+VE+AR	-07	-10
					AR+MK+MC	-07	-10
					WK+AR	-07	-09
					AR+EI+GS	-06	-09
RM	6352	162	VE+NO+CS		MK+EI	-48	-65
			-26	-40	MK+MC+EI	-47**	-66
			VE+AR+MC		CS+AR+MC+MK	-47*	-65
			-37	-61	AR+MK+EI+GS	-46	-65
			VE		AR+MK+MC	-46*	-65
			-11	-43	AR+MK	-43	-63
					AR+EI+MC	-42	-63
					MK+EI+GS	-42	-62
					AR+2MK+GS	-41	-62
					AR+MC	-40	-62

Notes. Decimal points have been omitted from correlations.
 r_u = Uncorrected validity; r_c = Corrected validity. Validities marked with asterisks are significantly greater than operational composite validities: * $p < .05$, ** $p < .01$

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