

ASVAB Theory of Action – Classification		
Three Major Claims		
<i>I. Specific KSAs are associated with occupation-specific performance and provide operational value for occupational classification</i>	→	<i>II. ASVAB subtests measure a useful sample of the KSAs associated with occupation-specific performance</i>
		→
		<i>III. Respondents classified on ASVAB composite scores have higher likelihood of success within particular military occupations (Service-Specific)</i>

Major Claim I
I. Specific KSAs are associated with occupation-specific performance and provide operational value for occupational classification.
Specific Claim
I.1. Specific KSAs can be described in terms of individual differences taxonomies.
Assumptions
I.1.a. If specific KSAs can be described in terms of individual differences taxonomies, then individual differences literature should support the taxonomic organization of specific KSAs.
Specific Claim
I.2. Specific KSAs are differentially related to performance across occupations.
Assumptions
I.2.a. If specific KSAs are differentially related to performance across occupations, then occupational analysis information should differentially identify KSAs as indicators of suitability for specific occupations.
I.2.b. If specific KSAs are differentially related to performance across occupations, then specific KSAs should differentially predict performance indicators across occupations (e.g., specific KSAs will be more highly correlated with outcome measures for some occupations and less highly correlated with outcome measures for other occupations).
Specific Claim
I.3. Specific KSAs improve prediction of performance within occupations beyond the level of prediction afforded by <i>g</i> .
Assumptions
I.3.a. If specific KSAs improve prediction of performance within occupations beyond the level of prediction afforded by <i>g</i> , then criterion-related validity evidence will demonstrate incremental validity over <i>g</i> .

Major Claim II
II. ASVAB subtests measure a useful sample of the KSAs associated with occupation-specific performance.
Specific Claim
II.1. ASVAB subtests measure specific KSAs.
Assumptions
II.1.a. If ASVAB subtests measure specific KSAs, then correlational and factor-analytic studies should support this factor structure.
II.1.b. If ASVAB subtests measure specific KSAs, then ASVAB subtests should correlate with other measures of their intended construct.
Specific Claim
II.2. ASVAB subtests measure KSAs that are related to performance in a reasonably broad range of military occupations.
Assumptions
II.2.a. If ASVAB subtests measure KSAs that are related to performance in a reasonably broad range of military occupations, then those KSAs should be conceptually related to military training or job performance requirements.
II.2.b. If ASVAB subtests measure KSAs that are related to performance in a reasonably broad range of military occupations, then ASVAB subtest scores should be correlated with measures of performance.
II.2.c. If ASVAB subtests measure KSAs that are related to performance in a reasonably broad range of military occupations, then ASVAB includes an optimal set of viable KSA measures.
Specific Claim
II.3. ASVAB subtest scores are of sound psychometric quality.
Assumptions
II.3.a. If ASVAB subtest scores are of sound psychometric quality, then subtest content specifications should adequately reflect the constructs of interest.
II.3.b. If ASVAB subtest scores are of sound psychometric quality, then item generation and review procedures should be consistent with industry best practices.
II.3.c. If ASVAB subtest scores are of sound psychometric quality, then operational item pools and items selected for administration to individual respondents should contain a sufficient number and mix of items well-aligned to their intended constructs.
II.3.d. If ASVAB subtest scores are of sound psychometric quality, then psychometric estimates of reliability should be acceptable for each subtest.
II.3.e. If ASVAB subtest scores are of sound psychometric quality, then ASVAB subtest scores should be robust to coaching and practice effects.
II.3.f. If ASVAB subtest scores are of sound psychometric quality, then equating and scaling methods should accurately place scores from different forms (item pools) onto a common scale and allow for interchangeable interpretation of scores from different forms (item pools).
II.3.g. If ASVAB subtest scores are of sound psychometric quality, then ASVAB subtest scores should be supported by rigorous norming procedures.

Specific Claim
II.4. ASVAB subtest scores are unbiased representations of respondents' KSAs.
Assumptions
II.4.a. If ASVAB subtest scores are unbiased representations of KSAs, then subtest items should not exhibit bias against protected groups.
II.4.b. If ASVAB subtest scores are unbiased representations of KSAs, then subtest scores should exhibit subgroup differences that are no greater than those for comparable measures.
Specific Claim
II.5. Administrative policies and procedures are informed by professional test guidelines.
Assumptions
II.5.a. If administrative policies and procedures are informed by professional test guidelines, then ASVAB administration procedures should be clearly documented.
II.5.b. If administrative policies and procedures are informed by professional test guidelines, then ASVAB score reports should be clear and the information provided should be actionable.
Specific Claim
II.6. Administrative policies and procedures are informed by psychometric evidence.
Assumptions
II.6.a. If administrative policies and procedures are informed by psychometric evidence, then the paper-and-pencil and CAT versions of the ASVAB should yield interchangeable scores.
II.6.b. If administrative policies and procedures are informed by psychometric evidence, then unproctored verified and proctored versions of the ASVAB should yield interchangeable scores.
II.6.c. If administrative policies and procedures are informed by psychometric evidence, then ASVAB delivery on other devices (e.g., tablets, cell phones) should yield scores interchangeable with those scores obtained via personal computer/laptop administration.
II.6.d. If administrative policies and procedures are informed by psychometric evidence, then ASVAB retest policies and procedures should be informed by data.

Major Claim III
III. Respondents classified on ASVAB composite scores have higher likelihood of success within particular military occupations.
Specific Claim
III.1. ASVAB composite scores are of sound psychometric quality.
Assumptions
III.1.a. If ASVAB composite scores are of sound psychometric quality, then the method of constructing composite scores should be supported by rational and/or empirical evidence to optimize desired outcomes.
III.1.b. If ASVAB composite scores are of sound psychometric quality, then cut scores should have been set using rigorous practices that follow professional best practices.
III.1.c. If ASVAB composite scores are of sound psychometric quality, then composite scores should have high overall reliability and lower error, especially near the cut score, resulting in classification accuracy.
Specific Claim
III.2. ASVAB composite scores are unbiased representations of respondents' KSAs.
Assumptions
III.2.a. If ASVAB composite scores are unbiased representations of respondents' KSAs, then the magnitude of composite score subgroup differences should be monitored.
III.2.b. If ASVAB composite scores are unbiased representations of respondents' KSAs, then ASVAB composite scores should not underpredict the performance of protected subgroups.
Specific Claim
III.3. ASVAB composite scores are differentially related to performance across occupations.
Assumptions
III.3.a. If ASVAB composite scores are differentially related to performance across occupations, then the set of KSAs measured by occupation-specific composites should be conceptually related to the set of KSAs required for the occupations for which they are used.
III.3.b. If ASVAB composite scores are differentially related to performance across occupations, then classification composite scores should be differentially correlated with occupational performance.
Specific Claim
III.4. ASVAB composite scores improve prediction of occupational performance beyond the level of prediction afforded by AFQT.
Assumptions
III.4.a. If ASVAB composite scores improve prediction of occupational performance beyond the level of prediction afforded by AFQT, then criterion-related validity evidence should demonstrate incremental validity beyond AFQT alone.
Specific Claim
III.5. The operational set of ASVAB classification composite scores maximizes predicted performance across occupations within the Service.
Assumptions
III.5.a. If the operational set of ASVAB classification composite scores maximizes predicted performance across occupations within the Service, then the composites should exhibit classification efficiency.

III.5.b. If the operational set of ASVAB classification composite scores maximizes predicted performance across occupations within the Service, then alternative methods of identifying classification composites should not improve classification efficiency.