



INFORMATION BRIEF

Criteria Cognitive Aptitude Test (CCAT[®])



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A person's cognitive aptitude is a powerful predictor of their future work performance and how suitable they are for the job.

Cognitive aptitude - often referred to as general intelligence or *g* - refers to the ability to solve problems, digest and apply information, learn new skills, and think critically. The Criteria Cognitive Aptitude Test (CCAT®) is one of Criteria's most popular aptitude tests and is commonly used for a broad range of mid- to high-level positions.

MEASURES

- Critical thinking
- Problem-solving skills
- Learning ability
- Ability to digest and apply new information



PREDICTS

Predict how well someone will acquire, organize, retain and apply information on the job



QUESTIONS

Candidates complete up to 50 questions



TIME

The CCAT is timed and takes 15 minutes to complete



Why is cognitive aptitude so important?

People who score well on cognitive aptitude tests use their high-level information processing skills to solve job-related problems more effectively, and to learn on the job more quickly. As a result, people with strong scores tend to perform better on the job and in training.

A strong and long-standing body of research demonstrates that cognitive aptitude is one of the most accurate predictors of job success:

- ✓ 1.6x as predictive as unstructured interviews
- ✓ 4x as predictive as experience.

Research has also shown cognitive aptitude to be valid, reliable and strongly predictive of future work performance. People with high levels of cognitive aptitude can:

- ✓ Perform work tasks more accurately and successfully
- ✓ Make decisions more effectively
- ✓ Use reasoning skills and solve problems
- ✓ Respond intelligently to new or complex circumstances.

Which jobs is the CCAT applicable for?

Cognitive aptitude is a critical underlying factor for almost every job, since all jobs require people to process information, solve problems and learn new information. It's especially important in jobs that require people to process large amounts of information, such as complex technical jobs and managerial roles.

The CCAT provides a traditional approach to assessing cognitive aptitude and is popular with customers assessing for mid- to senior-level roles such as managers, sales executives, software developers, executive assistants and analysts. It's also critical for jobs that involve a great deal of training, such as apprentice, intern or graduate roles.

What abilities does the CCAT measure?

The CCAT assesses three underlying abilities that, together, provide an overall measure of a candidate's cognitive aptitude.

Spatial reasoning

Ability to visualize objects in physical space, make spatial judgments, and solve problems.

Verbal ability

Reading and comprehension of words, logic, constructive thinking and attention to detail.

Math and logic

Ability to reason using numbers and numerical concepts. Also measures logic and analytical thinking.

What score ranges are available?

The CCAT includes a series of suggested score ranges that help you understand how each candidate's results meet the range that has been associated with successful performance in various roles. These ranges are based on large samples of prior scores from individuals applying for or occupying similar roles and are supported by multiple validation studies.

The suggested score ranges available include:

- ✓ Accounting/Finance
- ✓ Administrative Assistant/Clerical
- ✓ Analyst
- ✓ Bookkeeper
- ✓ Computer Programmer
- ✓ Controller
- ✓ Customer Service Representative
- ✓ Finance Manager
- ✓ Financial Analyst/Advisor
- ✓ Front Desk/Receptionist
- ✓ Lawyer/Attorney
- ✓ Loan Officer
- ✓ Network Administrator
- ✓ Operations Manager
- ✓ Product Manager
- ✓ Production Manager/Supervisor
- ✓ Project Manager
- ✓ Recruiter
- ✓ Sales Manager
- ✓ Sales Representative
- ✓ Senior Managers/VP
- ✓ Store Manager

Can I create my own score ranges?

You can create your own score ranges within the Criteria platform. We can work with you to gather and analyze results from your own organization (either from incumbents or using data from your applicant pool) to build appropriate score ranges for your roles.

What is the candidate experience like?

Flexible testing on any device

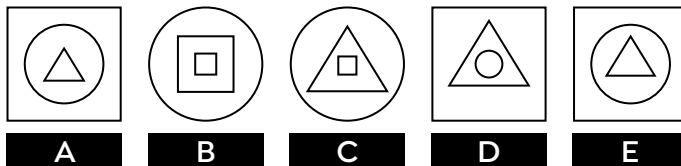
The CCAT is device-agnostic. This means candidates can take the test on any digital device they choose – a mobile phone, tablet, laptop or desktop – in any location and at any time.

Example questions

The CCAT contains 50 items in total. However, most candidates won't complete every question within the 15-minute time limit. These questions assess the three areas of spatial reasoning, verbal ability, and math and logic.

Example spatial reasoning question

Which of the following does not belong?



Example verbal ability question

Choose the word that is most nearly **OPPOSITE** to the word in capital letters.

LENGTHEN

- A. abdicate
- B. truncate
- C. elongate
- D. stifle
- E. resist

Example math and logic question

A group of 3 numbers has an average of 17. The first two numbers are 12 and 19. What is the third number?

- A. 17
- B. 19
- C. 20
- D. 23
- E. 30

Ensuring a fair candidate experience

Like all of our assessments, the CCAT can be completed remotely over the internet under unsupervised conditions. This provides a high level of flexibility and convenience for the candidate. When testing is conducted under unsupervised conditions, however, it is possible that the candidate may have had assistance in completing the assessment, and it is essential to protect the security of the assessments. We adopt the following best practice strategies to ensure online security and reduce the likelihood of cheating.

Dynamic item bank

To enhance test security, the CCAT is a dynamic assessment that draws on an item bank of thousands of individually optimized test items. This means that no two candidates will ever receive the exact same set of questions, giving you confidence in their individual results.

Secure online assessment

Our online testing engine is delivered using secure web technology, which allows us to ensure that assessment security and integrity is maintained and that assessment time is tracked accurately.

Detailed assessment session logging

From the moment the candidate logs in to start their assessments to the moment they finish, we create detailed test logs of the candidate's testing session, including time spent in the assessment, internet connectivity, and individual issues and actions within the assessment.



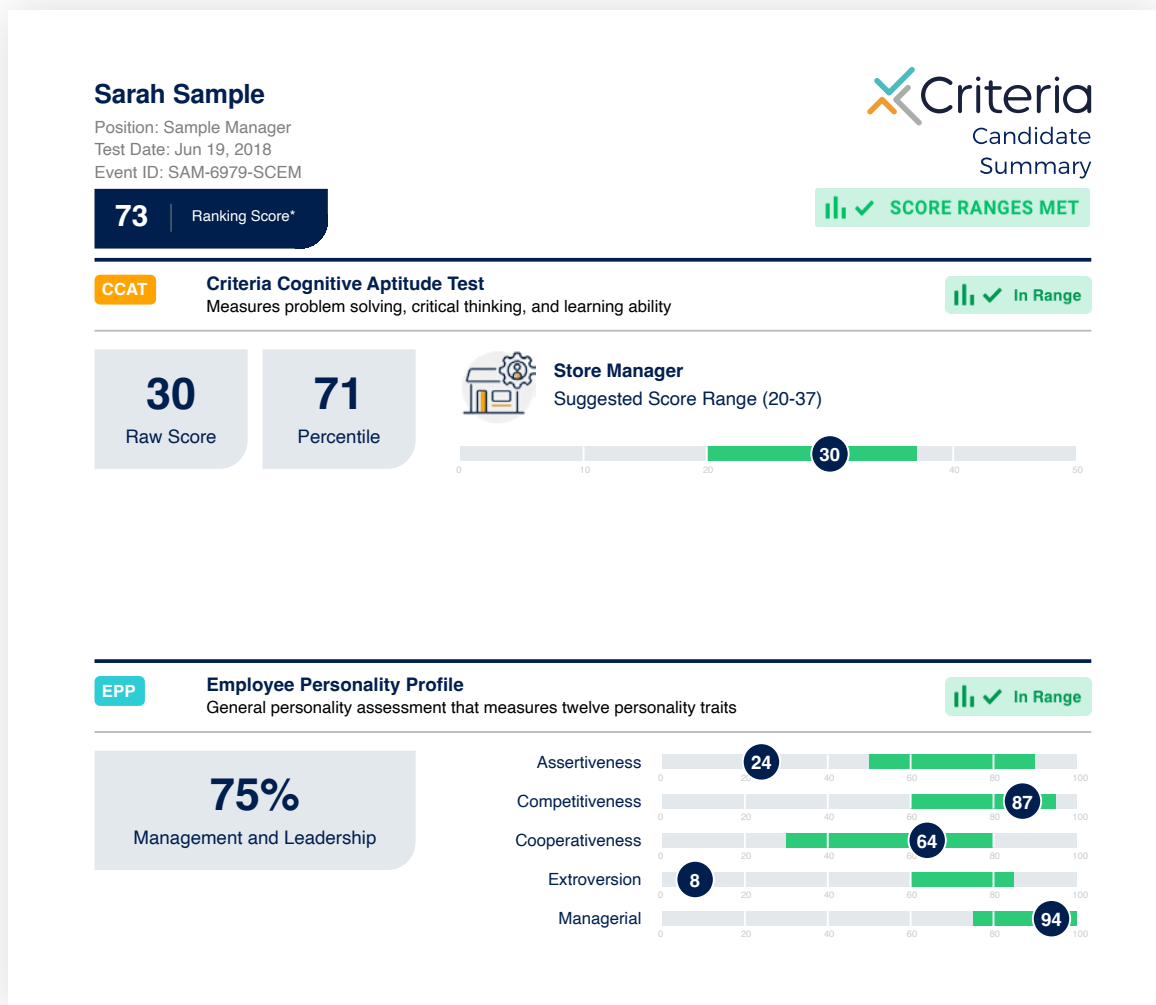
Reporting

After candidates complete testing, you can access two different reports.

- ✓ A **Candidate Summary Report** that provides a high-level overview of a candidate's results on the CCAT and any other Criteria assessments they've completed.
- ✓ A **Candidate Score Report** that provides detailed information about a candidate's scores on the CCAT.

Candidate Summary Report

The candidate summary report includes a quick snapshot of a candidate's results for each test they've completed. If you've enabled it, the ranking score - which displays a weighted average of a candidate's performance across individual tests - will also appear on the summary.



Candidate Score Report

The score report gives you more detailed results for a single candidate. It includes:

- ✓ Candidate information (name, position, date completed)
- ✓ A **Results Summary**, which displays the candidate's raw score out of 50 and their percentile score.
- ✓ A **Raw Score** graphic showing their raw score on a normal distribution, which indicates how their score compares to other test-takers.
- ✓ If enabled, you'll also see a shaded area in the raw score section that indicates how the candidate's raw score compares to a selected score range. In the example below, the candidate's raw score of 24 falls within the Store Manager suggested range of 20-37.
- ✓ A **Results Details** section, displaying their percentile scores for each of the three sub-categories measured by the CCAT.

Vince Sample
Position: Sample Test Portfolio
Test Date: Jan 17, 2022
Event ID: ABC-D1Fg-2H3l-jklmN | Test Ver: 1.0

 **Criteria**
Score Report

 **APTITUDE TEST**
Criteria Cognitive Aptitude Test

The CCAT measures cognitive aptitude, or general intelligence. This test provides an indication of a subject's ability to solve problems, digest and apply information, learn new skills, and think critically. Cognitive aptitude is one of the most accurate job predictors of job success for any position.

Results Summary

24 Raw Score	50 Percentile
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Raw Score



Selected Score Range  **Project Manager**
Suggested Range: 22-37  **In Range**

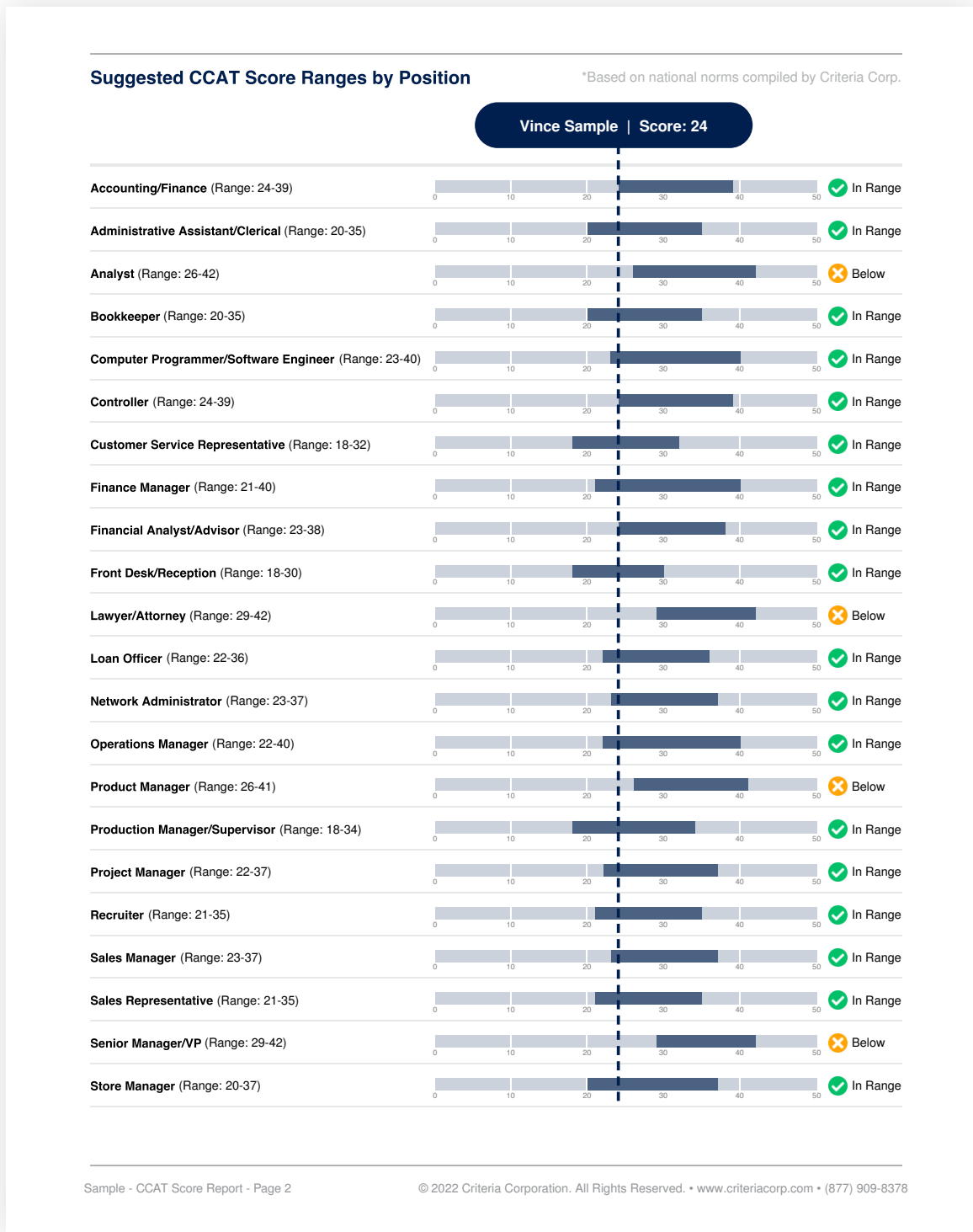
Results Details

Vince Sample achieved an overall score of 24, which means Vince answered 24 questions correctly. This corresponds to a percentile rank of 50, meaning Vince scored better than 50% of the people who have taken this test. Below are details of how Vince performed in specific sub categories.

 Spatial Reasoning Percentile 58 Ability to visualize, make spatial judgements, and problem solve; correlated to general intelligence.	 Verbal Ability Percentile 62 Reasoning and comprehension of words, constructive thinking, and attention to detail.	 Math & Logic Percentile 24 Ability to reason using numbers and numerical concepts. Also measures logic and analytical thinking.
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In the **Suggested CCAT Score Ranges by Position** section, you'll see how the candidate's raw score compares to all of the available score ranges for the CCAT.



View an example candidate score report [here](#).

Psychometric properties

Normative sample

The normative group for the CCAT was developed using a sample of 106,740 individuals. The sample was made up of adults aged 18 and older, including both incumbents and job applicants. These individuals were being assessed for employee selection and/or benchmarking purposes, and represented a sample of individuals from hundreds of different companies whose current positions included managerial positions, technical services, customer service, and sales positions. The median score for the normative sample is 24, and the standard deviation is 7.00.

Since the initial standardization sample, the CCAT has been administered over 4 million times. Based on the large volume of position-specific data that has been gathered on the CCAT, Criteria has established score expectations and score ranges for various occupations.

Reliability

Reliability typically refers to the internal consistency of a test, or the extent to which all the questions in the test measure the same construct and result in similar test scores. The most common measurement of test reliability is Cronbach's alpha, which can range from 0.00, indicating no reliability at all, to 1.00 indicating perfect reliability. More reliable assessments produce assessments that are more precise and more stable.

Based on a sample of 97,929 test takers, the Cronbach's alpha for the CCAT is 0.86. Psychometricians generally consider alpha coefficients of .70 or above to constitute an acceptable level of reliability. Therefore, the alpha coefficient of .86 demonstrated by the CCAT indicates a very high degree of reliability.

Construct validity

Construct validity is established through evidence for convergence, or the relationships demonstrated between a test with other well-established tests that are purported to measure the same construct or attribute. The CCAT has demonstrated construct validity through its strong correlations with other leading measures of cognitive aptitude.

For example, among a sample of 34 individuals who took both the CCAT and Wonderlic Personnel Test (WPT), the correlation observed between the CCAT and the WPT was .78. Similarly, among a sample of 355 individuals who took both the CCAT and the Minicog Rapid Assessment Battery (MRAB), the correlation observed between the CCAT and the MRAB was .55. Thus, the CCAT has demonstrated strong construct validity evidence through its high correlations with similar assessments like the WPT and MRAB.

Criterion-related validity

Criterion validity refers to the extent to which test scores relate to a relevant outcome such as job performance. The CCAT functions as an especially effective predictor of performance for jobs that require enhanced abilities in the areas of problem-solving, learning, critical thinking, and verbal and mathematical reasoning. Criteria Corp has conducted numerous criterion validity studies in collaboration with research partners and customers across many different industries. These studies have demonstrated evidence for the criterion validity of the CCAT in a wide variety of organizational settings.

For example, in a sample of 745 sales representatives, the CCAT was found to correlate .33 with performance in a training period. Similarly, in a group of 42 social workers at a government agency, the CCAT was found to correlate .44 with supervisor rated performance.

Case Studies

Consumer finance company uses CCAT to lower hiring and training costs

[View case study](#)

Technology call center uses the CCAT to reduce turnover

[View case study](#)

SBMA reduced time spent hiring by 63%

[View case study](#)

Tech company improves performance of its software engineers

[View case study](#)

Schweiger Dermatology Group reduces turnover by 57%

[View case study](#)

Sales reps who pass the CCAT and EPP generate 7x more revenue

[View case study](#)

Consulting firm improves job performance and retention for analyst

[View case study](#)



