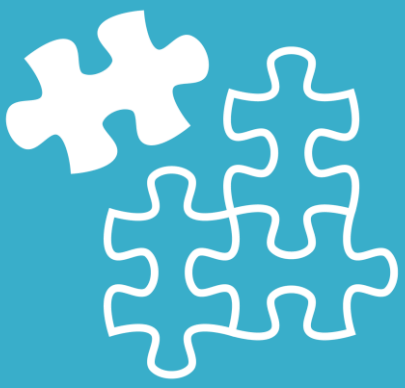

ACE FACT SHEET

ACE lets you select the right person for the job by matching cognitive potential with job complexity.

ABOUT ACE

The ACE is a cognitive ability test that evaluates the competence for logical analytical reasoning - the competence to identify patterns and complex relations in information, to draw conclusions, and to drive results.

TEST DESIGN

ACE is a *power* test based on Computer Adaptive Testing (CAT) technology. This means that ACE measures a person's maximum cognitive potential by automatically adjusting the level of difficulty of its questions to the test takers ability level.

Three cognitive domains are available in ACE: numeric, spatial and verbal. The test administrator may freely choose to include a minimum of two of these domains or to employ all three in the test. A non-verbal version of ACE for dyslexics is also available

CONFIRMATION TEST

A short confirmation test can be issued to candidates in a supervised setting to confirm the result obtained in an online ACE.

The confirmation test has an average test length of 7 minutes, and more than 99% accuracy in identifying honest respondents.

LANGUAGES

ACE is presently available in Danish, Dutch, English, Estonian, French, Finnish, German, Italian, Norwegian, Polish, Portuguese, Russian (only reports), Spanish, and Swedish.

DEVICES

Desktop/Laptop devices (PC or Mac) are recommended. Tablets and Mobile phones are not recommended to complete the test.

TEST POLICY

ACE requires the person responsible for test administration or -analysis to be certified by Master. The Interview Guide may be used by a non-certified user under the supervision of the certified test user.

Testing procedures should always adhere to Master's best practice guidelines.

NORMS

The latest norms are from 2018 and are representative for the general working population within each country.

Country	Size (N)
Austria	258
Denmark	7,894
Finland	11,125
Germany	334
India (English)	891
Norway	2,165
Poland	317
Sweden	9,408
Switzerland (German)	410
International	**32,802**

REPORTING

The Score Report presents and explains the ACE result in a clear and direct manner using infographics and score-specific text. All results are presented as STEN scores from 1 to 10. The Interview Guide adds Criteria from the Assessment as well as questions that can help inspire the interview.

It is possible to automatically forward the Score Report to the test taker upon test completion.

PSYCHOMETIC PROPERTIES

RELIABILITY

	Precision level	
	High	Standard
Reliability (1-SE^2)	0.83	0.71
Avg. time	60 min	20 min
Max. time	75 min	30 min

VALIDITY

Criterion validity

ACE has good criterion validity, and using ACE *Criteria*, has been shown to predict higher job performance in sales, at a large retail company (**r = 0.42** for Spatial Ability).

Construct validity

Computer simulation studies of ACE shows a correlation of **r = 0.89** between true and estimated scores.

ACE is a continuation of the Master Competence Analysis (MCA), which was shown to correlate highly (r = 0.7) with the well-established g-factor test Ravens Advanced Progressive Matrices (APM).

Differential Item Functioning (DIF) – also called Item Bias – was rejected across gender, employment level or education. This shows that ACE performs equally well across different groups.

REFERENCES

Makransky, G., & Glas (2010). An automatic online calibration design in adaptive testing. Journal of Applied Testing Technology, 11, n1.

Master International (2012 →). Online ACE Documentation Manual. http://testdocumentation.master-hr.com