



smart. valid. preferred.

Guidelines for retesting job candidates

This guide highlights 'when' it is appropriate to retest, 'what' you should retest and 'how' to do it, as well as how to interpret the results and how to communicate effectively with candidates.



cut-e Group

www.cut-e.com
E-mail: info@cut-e.com

Version 1.0 November 2016

www.cut-e.com

Guidelines for retesting job candidates

Online psychometric assessment is a fair, valid and cost-effective method for pre-screening job applicants. To prevent candidates from sharing the 'answers', today's psychometric tests adapt to the candidate's responses and/or feature question items that are randomly generated or randomly chosen from large item banks.

However, since the tests are conducted remotely, it is still possible for a candidate to ask someone else to complete a test 'for' them or 'with' them – or they may use auxiliary devices which are not permitted. So, in some situations, in order to reduce the risk of cheating, it is advisable to retest candidates, to substantiate their scores in a supervised environment.

This guide highlights 'when' it is appropriate to retest, 'what' you should retest and 'how' to do it, as well as how to interpret the results and how to communicate effectively with candidates.

When to retest

Retesting involves an investment of time and money, so it should primarily be undertaken:

- When the psychometric test is the only selection method used or it is followed by a method with low validity such as an unstructured interview.
- When the risk of cheating is known to be particularly high.
- When fairness is a key concern and unsuccessful candidates could accuse successful applicants of cheating.

Which tests to retest

Psychometric tests usually measure either 'typical performance' or 'maximum performance'. Instruments that assess typical performance do not have one correct answer; they measure different styles of approaching tasks (e.g. a personality questionnaire, integrity questionnaire or situational judgement questionnaire). There is no point in retesting for measures of typical performance.

Instruments assessing maximum performance are used to evaluate the abilities of applicants. There are correct answers and candidates who are faster and more accurate obtain higher scores. These tests are more vulnerable to cheating, because a candidate could ask someone else to take the test for them. Supervised retesting should therefore be considered if you are using maximum performance tests, such as verbal, numerical, logical and other ability tests.

Supervised retesting should be considered if you are using maximum performance tests, such as verbal, numerical, logical and other ability tests.

How to retest

Make it clear during the application process that you will conduct supervised retesting. Explain why and how this will be done. You can even create an 'honesty contract' by explaining your reasons for including assessments and asking for the candidate's cooperation. With these actions, candidates may feel less inclined to cheat.

Retesting is usually undertaken by inviting candidates to the company site or to a testing facility, which should be accessible to people with disabilities. Retesting rooms should have a number of computers, ideally all the same model or at least with similar specifications in terms of the monitor, mouse and keyboard. Verify in advance that each computer works and allow candidates time to familiarise themselves with the hardware. The computers should be

separated from each other to allow candidates privacy while they are completing their tests. The environment should be clean, well lit and free from distracting noises. If appropriate, paper and a pencil or other (permitted) auxiliary devices should be provided. Candidates should be asked not to put their phones or other personal items on the desk.

Good practice when retesting is to offer candidates the opportunity to practice the tests before the unsupervised session. These actions should help to reduce any discrepancies between the first (unsupervised) and second (supervised) test.

Good practice when retesting is to offer candidates the opportunity to practice the tests before the unsupervised session.

How many retests

The most popular option is to retest all the ability tests that were used in the pre-screening. So, for example, if the unsupervised session included a personality questionnaire, an SJQ, a verbal ability test and a multi-tasking test, the retesting would include the verbal ability and the multi-tasking. However, if your selection process includes a high number of ability tests and there are time constraints, then choose a representative subset of them when retesting. Choose the tests that you feel are most relevant to the job.

In some cases, unsupervised tests are used as pre-screening. In other words, they are used to reduce the number of applicants by screening out those who are unsuited to the role or who lack the necessary values or motivation to perform well. Here, the supervised session can include more and even different tests than have been used before. The scores of the supervised and unsupervised tests are not compared in this case, as the new battery of tests is considered as the next stage of the application process.

In some countries, such as China, there are businesses that offer to 'train' individuals, to help them improve their scores in psychometric tests. A study by cut-e reveals that it is possible for candidates to marginally improve their results in ability tests through 'training' - but only to a certain point (not more than half a standard deviation). Essentially, if candidates are more familiar with how these tests work, they'll be better prepared to take each test. But their improvement will only be minor. Their scores will quickly stabilise and additional training will have no beneficial impact. If you're recruiting in countries where 'training' is available, we recommend that you slightly increase the pass scores of your initial ability tests (and any subsequent retests) or that you amend the norm you use to compensate for possible training activity.

How many people to retest

Best practice is to retest all the candidates that were successful in the first stage as this is fair for everyone. If this is unpractical, a subsection of the candidates could be randomly selected for retesting. In some organisations, it is common practice to retest only the highest performers. However, it is fairer to randomly select candidates and to explain what you're doing and why, for maximum transparency.

The score a candidate obtains in a supervised retest will never be exactly the same as their unsupervised test, so you should expect some random fluctuations. An honest candidate could score below the benchmark in their second test. If you've only retested a subset of your candidates, you could offer a follow-up interview to those who have been unsuccessful, to find out why their scores were lower. You could even offer them the chance to repeat their assessment.

What results to expect

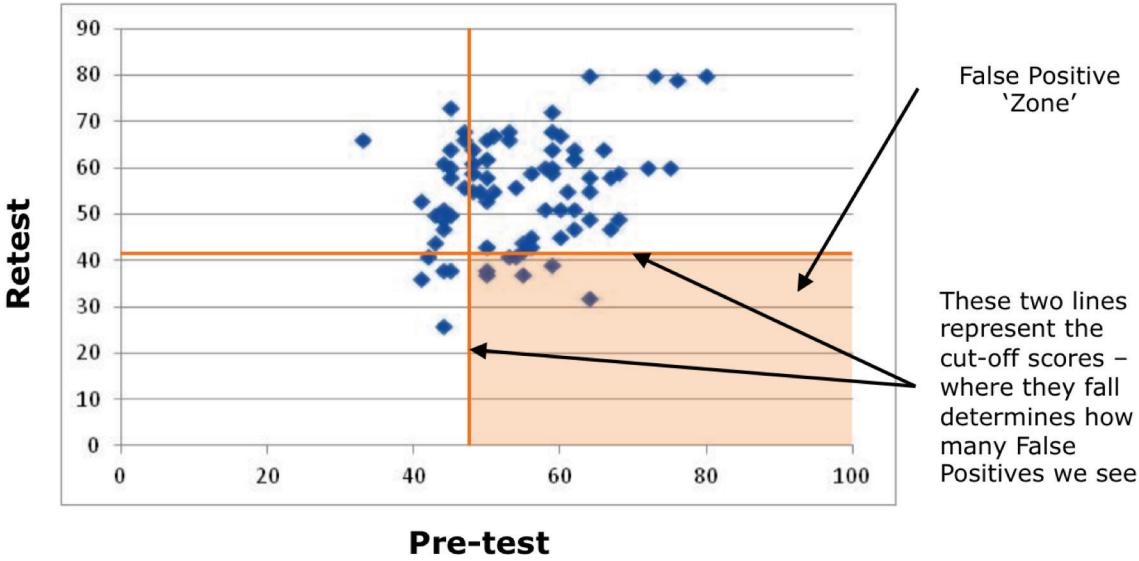
Where the same test is used in the application process and the retest, there are a number of factors that can influence a candidate's performance. For example:

- Their ability
- The administration conditions (e.g. the hardware used or any background noises)
- Differences in the candidate's mood or their motivation
- The 'reliability' of the tests used
- Whether or not they receive help from someone else

Discrepancies in the results of the two tests can be explained by:

- The item generators or item banks in the tests used (candidates may have responded better in one test than the other)
- The candidate may have completed the two tests on different devices
- The candidate may have been under stress when completing the second test
- The candidate may take the supervised test more seriously
- In the unsupervised session, the candidate may have been distracted or interrupted

Consequently, there may be 'False Positives' (where the score goes down in the retest) or 'False Negatives' (where the score goes up in the retest). False Positives are important, as this could indicate that the candidates have cheated. However, the fact that they have a lower score on the supervised test does not necessarily mean that they cheated. The score difference could be due to other reasons.



The image shows a typical distribution of scores in unsupervised (pre-test) and supervised (retest) assessments. The red lines represent the threshold scores required for the next stage. This shows that people tend to score higher in the retest than they did in the pre-test, although this is not always the case. Thus, a few candidates fall in the False Positive area, where they have scored above the benchmark in the unsupervised test and below the benchmark in the supervised test.

How to select who passes the retest

There are different methods that could be used to choose who passes the supervised test.

The first method involves looking at the differences between the scores obtained in the supervised and unsupervised tests. A difference of 20 (two full standard deviations) could indicate that cheating has occurred. However, this risks jeopardising good candidates who had exceptional scores in the first round and average scores in the second round.

A second option is to use a regression analysis to calculate the most probable result that a candidate would achieve in the retest, given the scores they obtained in the first test. A regression formula should take into account the statistical phenomenon called "regression to the mean". Sometimes people will perform well and sometimes they'll perform badly. However, it is probable that next time their score will be closer to the mean score of the population. The regressed scores can then be used to calculate the difference from the observed scores. These differences can then be standardised and only those people whose differences are very high would be excluded from the process. This method doesn't jeopardise good candidates, but it requires a good deal of calculation.

There are different methods that could be used to choose who passes the supervised test.

Finally, a benchmark pass can be chosen for the unsupervised and the supervised tests. This is the easiest solution. All the candidates who pass the benchmark in the unsupervised test would be invited to take the supervised assessment. People that don't pass the benchmark in the supervised test were not necessarily cheating. Due to random fluctuations we expect a number of False Positives.

There are three possible explanations for this:

- The person cheated in the unsupervised test.
- The person was lucky in the unsupervised test and the low score in the supervised test is a better representation of the candidate's true ability.
- The person was unlucky in the supervised session and the high score in the unsupervised test is a better representation of that candidate's ability.

In order to avoid de-selecting people belonging to the third category, who could potentially be good employees, it is best to slightly lower the benchmark in the supervised test. A reduction of 10% is usually appropriate. It is common practice to use a cut-off of 45 in the unsupervised test and of 41 in the supervised session, but this should be discussed with a consultant, as it depends on how many people are expected to pass to the next stage.

Using a benchmark pass – rather than considering single candidate differences between pre- and post-scores – is fairer and more practical because:

- It doesn't imply that candidates have cheated if they don't pass the second test. They will only be told that they didn't pass the benchmark in the second session. This is objective and can't be challenged.
- The procedure is simple and doesn't require advanced statistical methods.
- Candidates will need to pass two different assessments. This reduces the probability of having False Positives and of hiring poor performers.

Alternatively, the unsupervised test could be used only as a pre-screening procedure and the supervised test could be the actual test. In this case, it would also be possible to rank the applicants based on their scores in the supervised test and to select a specific number of candidates to bring to the next stage.

Giving feedback

It is very important 'not' to tell candidates that they have been excluded from the process because you suspect they have cheated. Indeed, this would be an assumption as there's no perfect method that will reveal whether or not they really have cheated. Best practice is to explain to excluded applicants that they have failed to pass the minimum benchmark in the supervised retesting session.

Conclusion

The primary benefit of assessments is that they help you to identify individuals who are right for the role and right for your organisation. However, you have to be as certain as possible that each assessment was actually undertaken by the candidate (without help) and that they're an accurate reflection of that individual's ability and potential. Retesting can put your mind at rest.

In this guide, we've looked at when to retest, what to retest and how to retest, as well as the implications for choosing and communicating with candidates.

A thorough retesting process can give you greater confidence in your selection process – and it can also enhance your candidate experience. It demonstrates to the best candidates that you have a robust assessment process in place. This gives them confidence that less scrupulous applicants will not be able to shortcut the process.

**To find out more about psychometric testing and best practice, please visit:
www.cut-e.com/online-assessment**



About the author Dr Katharina Lochner

Dr Katharina Lochner is Research Director for the *cut-e* Group. She has a degree in work and organisational psychology from RWTH Aachen University, a doctorate in psychology from the Free University of Berlin and over 10 years' experience working with clients in Europe and Asia Pacific.

Her areas of expertise are the construction and evaluation of online psychometric tests and questionnaires, designing and implementing assessment centres. As the author of the *cut-e* ScienceBlog, Katharina writes weekly updates on research findings that can improve people's work and life and, within *cut-e*, she connects research with the practice of work and organisational psychology.



About the author Davide Cannata

Davide Cannata is a research consultant for the *cut-e* group. He has a double M.Sc. in work, organisational and personnel psychology from the University of Bologna and the University of Barcelona. In 2014, he co-founded Scienceforwork.com, an online platform to promote evidence-based practices in HR. His area of expertise is the construction and evaluation of psychometric questionnaires.

cut-e is a world leader in the design and implementation of innovative online tests and questionnaires for recruitment, selection and development. *cut-e* helps companies identify people with the right capabilities and cultural fit to deliver optimal business results. *cut-e* carries out over 12 million assessments per year in over 70 countries and 40 languages.