



4exMilitary Jobs Ltd

Information Guide No. 12

Psychometric Tests

Prepared by: David Beck

Dated: 6th August 2010 ©

4exMilitary Jobs Ltd.

A leading Internet Job Board and Recruitment Consultancy specialising in assisting Ex- Military personnel
Enterprise House, Ocean Village, Southampton. Hampshire SO14 3XB United Kingdom Tele: +44 (0) 23 8023 4964
Fax: +44 (0) 23 8063 6661 E mail: info@4exmilitary.com Web URL : www.4exmilitary.com
Registered in England 7001674



Information Guide No. 12

Psychometric Tests

Contents

1. Introduction
2. Types of Psychometric Tests
3. Advice for Taking Psychometric Tests
4. On Line Testing

4exMilitary Jobs Ltd.

A leading Internet Job Board and Recruitment Consultancy specialising in assisting Ex- Military personnel
Enterprise House, Ocean Village, Southampton. Hampshire SO14 3XB United Kingdom Tele: +44 (0) 23 8023 4964
Fax: +44 (0) 23 8063 6661 E mail: info@4exmilitary.com Web URL : www.4exmilitary.com
Registered in England 7001674

1. INTRODUCTION

Psychometric tests are structured tests, taken in exam-like conditions, which aim to measure objectively a person's ability, or certain aspects of their personality.

Most psychometric tests which measure ability, and virtually all accredited psychometric tests which measure aspects of personality, are devised by occupational psychologists. Their aim is twofold: to provide employers with a reliable method of selecting the best applicants, and to design tests carefully so they are fair to all applicants.

All psychometric tests, except for personality tests, are strictly timed.

1.1. What do Psychometric Tests Measure?

There are many, many different types of psychometric test. A common misconception is that psychometric tests only measure personality, but that is not true.

Some measure your ability to understand the written word, or to reason with numbers. Others measure your ability to solve mechanical problems, or follow instructions accurately, or be able to understand data which is presented in a variety of ways. Then there are the personality tests assessing everything from motivation to working preferences.

Psychometric tests cannot measure everything. For example, they can't really measure enthusiasm, or stubbornness etc.

1.2 Who uses Psychometric Tests?

At the time of writing, well over 95% of the FTSE 100 companies use psychometric testing to select their staff, as do the Police, the Civil Service, Local Authorities, Armed Forces, the Fire Service and even the National Health Service, financial institutions, retail sector companies, the motor industry, the IT industry, management consultants, airlines, the power industry...the list is endless.

Virtually every large or medium sized organisation in the UK uses psychometric testing as part of their recruitment process, irrespective of industry. Furthermore, the use of psychometric tests is widespread in Europe, Australia and the USA. It doesn't matter what level of job you are applying for. Psychometric tests are used to select all types of staff, everyone from the most junior positions to Director level. One thing is certain, if you are looking for a job, you are more than likely to be asked to take a psychometric test.

2. Types of Psychometric Tests

The following are the main types of psychometric tests and each is described briefly below:

- Verbal Reasoning
- Numerical Reasoning
- Abstract Reasoning
- Spatial Reasoning
- Personality Tests

Verbal Reasoning

Verbal reasoning tests are multiple-choice tests which measure your ability to reason with words. They are widely used in recruitment to select staff, because the ability to understand the written word is an essential skill for most jobs.

Improving Verbal Reasoning

- In critical reasoning tests, always read the passage thoroughly. Don't skip through sections, or scan the text at high speed. Reading with understanding requires concentrated effort - not an easy thing to do however good your reading skills. Reread anything of which you are unsure.
- Also read the questions very carefully to ensure you understand exactly what you are being asked.
- Look at the answer choices and quickly eliminate any you know to be incorrect.
- Concentrate your energies on deciding between the most likely possibilities.
- Think carefully before selecting an answer which includes words like 'always', 'never', 'true', 'false', 'none' and 'all'. These words leave no room for manoeuvre or any exception whatsoever.
- Answer the questions using only the given information. Don't let prior knowledge or your opinion on the subject matter influence you. Only your ability to understand and make logical deductions from the passage is being tested.

- Verbal reasoning tests demand a high level of concentration, allow yourself a break every now and then. Sit up straight, shut your eyes and take a few deep breaths, just for 20 seconds or so. This will calm you down, relax your back and give your eyes and brain a well deserved rest.

To improve general performance in verbal reasoning tests:

- Read books and newspapers.
- Do verbal problem-solving exercises like crosswords.
- If applying for a managerial position, read reports and business journals.
- If applying for a technical job, read technical manuals and instruction books.

Numerical Reasoning

Numerical reasoning tests are written, multiple-choice psychometric tests which are used as part of the selection procedure for jobs with any element of figure work.

Improving Numerical Reasoning

However numerical reasoning questions are presented, and at whatever level, you really do need a sound understanding of the following basic maths skills:

- addition
- subtraction
- multiplication
- division
- decimal numbers
- fractions
- percentages

This is essential, especially for questions which require any sort of mental calculation.

Remember for many numerical reasoning tests, the use of a calculator is prohibited (however, take along a calculator, just in case).

Basic maths skills are all very well, but in higher level tests your ability to *reason* with numbers is also being tested. Here are some ways to improve your numerical reasoning ability:

- Practice maths with and without a calculator. Practising really does make a difference.
- Do number puzzles in newspapers and magazines.

- Keep score when playing games like darts, card games, etc.
- Calculate how much your shopping will cost before you reach the till.
- Work out how much change you should receive when you pay for something.
- Learn your times tables off by heart.
- Read financial reports in newspapers.
- Study tables of data.

Abstract Reasoning Tests

Abstract reasoning tests, or diagrammatic reasoning tests as they are sometimes called, are psychometric tests which use diagrams, symbols, signs or shapes instead of words and numbers. In other words, they are visual questions.

Because they require good visual thinking skills rather than verbal or numerical skills, they are often considered to be a very good indicator of a person's general intellectual ability. For this reason they are given to applicants over a wide range of jobs.

All abstract reasoning tests are strictly timed, and every single question will have one, and only one correct answer.

Abstract Reasoning Tests - How To Improve Your Performance

- Try doing puzzles in newspapers, magazines and quiz books which involve diagrams.
- Play games which involve thinking out a problem visually and in a logical sequence, for example chess, Labyrinth, or computer Freecell.
- Abstract reasoning questions are often presented as sequences. Watch out for sequences which have separate components which work in different ways.

At first glance, abstract reasoning questions may seem impossible. But by reading the instructions very carefully, and possibly by having a look at the answers to the first few questions, you'll see they are not so difficult after all.

Spacial Reasoning Tests

There are people who may not be so hot with words or numbers, but are good with space. They can see an object in their mind, and manipulate it, turn it round, upside down, or pull it in and out of shape.

These people are said to have good spatial awareness, and they often find success in the field of design, illustration, architecture, publishing, technology, electronic engineering and IT. Therefore it is hardly surprising to find employers in these industries using spatial reasoning tests to select applicants for jobs which require 3- dimensional perception.

The interesting thing about these test questions is that people with extremely good spatial awareness 'see' the solution immediately, without having to even think about it. But for most of us, the answers are not so obvious and you might need to make more of an effort to manipulate the shapes in your mind (or even do as I do - physically turn the page round).

In common with other psychometric tests, spatial reasoning tests are strictly timed, and every single question has one, and only one correct answer.

Accuracy Tests

Tests that measure accuracy have various names. They can be called 'acuity tests', or 'clerical tests', but whatever the label they basically do the same thing.

They are multiple-choice tests which measure your ability to:

- deal with information
- follow instructions precisely
- work at high speed
- check material for errors
- maintain a high level of accuracy and concentration.

As with all the different types of psychometric test, tests of accuracy are strictly timed, and every single question will have one, and only one correct answer.

Personality Tests

Personality tests or questionnaires are psychometric tests which assess the different aspects of personality, character, and behaviour relevant to the world of work.

However, personality questionnaires, or 'self-reports' as they are sometimes called, are not tests in the true sense of the word, for two reasons:

1. there are no right or wrong answers
2. they are not timed.

What they are, though, is popular. Written by occupational psychologists and administered by trained HR personnel, their use has increased dramatically in the last few years. From shelf-stacker to Director, apply for a job with any medium to large organisation, commercial or otherwise, and there is every chance you will be asked to complete a personality questionnaire.

The results of the personality questionnaire could determine your overall suitability to work for a particular organisation, or place you in an appropriate department or team once the decision has already been made to employ you. They're also very useful for recruiters, because it gives them something to talk about when they interview you.

There are two main types of personality questionnaire. The first is often referred to in HR jargon as 'competency' questionnaires.

Competency questionnaires

Competency questionnaires tend to be pretty short, and they focus on behavioural actions, which are things like:

- Managerial qualities (leadership, planning, organisation, attention to detail and persuasiveness).
- Professional qualities (specialist knowledge, problem solving, analytical ability, oral and written communication).
- Entrepreneurial qualities (commercial awareness, creativity, understanding of the need to plan for the longer term).
- Personal qualities (an ability to work well with other people, flexibility, resilience and motivation).

Competency questionnaires are frequently used on application forms and online application forms. Here's an example of the sort of question you might get:

I am the sort of person who....

- A. Easily establishes rapport with reports.
 - B. Influences the course of meetings.
 - C. Speaks coherently.
 - D. Encourages colleagues to meet objectives.
-
- A. Writes creatively.
 - B. Seeks answers to problems.
 - C. Is effective in communicating requirements.
 - D. Is aware of costs.

For each question you have to decide which statement is the most like you and also which is the least like you - not an easy task.

Competency-type questions are also a favourite with interviewers who, analyzing the answers you gave on the application form test, like to hit graduates with questions like:

'Tell me about a situation in which planning and organisation was vitally important to you.'

You can see what they're getting at; they want to know how you behave in the work situation. If, as a student, you have no formal work experience, think about how you behaved in similar situation at university, or another time in your life.

The way competency questionnaires are scored is that generally, each organization using them chooses a small number of qualities which they feel are essential to the particular job, and use these to put together their own unique scoring key. Very sensible actually, since nobody in the world has all the qualities listed above. So if you are rejected by a company on the basis of an application form test, don't worry. You could possibly be the 'wrong' sort of person for them, but perfect for the next company you apply to.

Therefore I suggest it's best to forget about the scoring mechanism and just answer as honestly as you can, because it's in your interest to do so.

True personality tests

True personality questionnaires are usually much longer than competency-type questionnaires. For example, one version of SHL's very well known *OPQ 32*, which asks you to answer questions in a similar format to the Rating Statements test shown below, has 230 items. Another version, which is similar to the Making Choices test, also shown below, has 104 blocks.

Personality questionnaires are generally used when you go along to be interviewed, or when you attend an assessment centre. They are scored by measuring the test result against 32 different dimensions of personality. These include:

- Relationships with people (how persuasive, controlling, outgoing, modest, caring, democratic, independently minded, confident or outspoken you are).
- Your thinking style (how rational, evaluative, conventional, conceptual, innovative, forward thinking, detail conscious, conscientious or rule-following you are).
- Your feelings and emotions (how relaxed, worrying, tough-minded, optimistic, trusting, emotionally controlled, vigorous, competitive, achieving or decisive you are).

Personality questionnaires measuring these qualities are used extensively to select graduates, but if the list looks a little daunting, don't worry. As with competency questionnaires, companies are just looking for the 'right' people - which means you could turn out to be the 'wrong' sort of person for one, but perfect for another.

3. Advice for taking Psychometric Tests

Here are a few tips for when you are about to take a psychometric test:

Listen carefully

When you are taking psychometric tests, or any sort of test for that matter, you must listen very carefully to the test administrator's instructions. Pay particular attention to what they say about the end of the test. Unlike academic exams, the Administrator may not be allowed to warn candidates that time's nearly up.

Ask questions first

If there is anything about the test instructions you do not understand, or you have any other problem at all, then the time to ask is before it starts. Once the clock is ticking no interruptions will be allowed.

Check out the paper

Instead of plunging straight into the test, have a quick look through the paper so you can see what you're up against. Is there a separate answer sheet? How many questions are there? How many different sections? Plenty of people have sat smugly in an exam room congratulating themselves on their speed only to discover, right at the last minute, that they've missed the last page.

Pace yourself

Pacing yourself is all about working through the paper at the right speed. Too fast and your accuracy will suffer. Too slow and you'll run out of time.

Once you've looked at the test paper, try to estimate how much time you have to answer each question, for example 50 questions in 25 minutes equals 30 seconds each. Once you've done this you'll know that after 10 minutes you should have tackled around 20 questions, and after 20 minutes you should have tackled around 40 questions and so on. As you work through the paper, check your progress from time to time. This should ensure you never get too far behind, and also reassure you that you're doing OK.

Some people even advise scribbling the desired 'finish time' for each section right there on the test paper to remind you to check the clock as you work through the test.

Note: Sometimes the ability-type tests get harder as you go along, so consider leaving more time for the later questions.

One tricky situation that can occur is when you come up against a question that you simply cannot answer. If you only have around 30 seconds per question, you can see that spending 10 minutes on one of them is a bad idea.

So if you get stuck, don't give yourself a hard time, simply give it up and move on. If you make a tiny mark next to the unanswered question (or ring the question number) you'll be able to see at a glance which questions still need tackling. If you have any time at the end, you can go back and try again.

Read the questions

Read each question carefully so you know exactly what information you are being asked for. This might sound totally obvious, but when you're under stress it's very tempting to rush and not bother to check what you're being asked to do. Many people are so used to scanning through chunks of text at high speed, they find reading every single word with concentration incredibly difficult. So slow down and concentrate.

Work through the questions in order

Some people skip through test papers looking for questions they know they'll be able to answer easily. The trouble with this is that it wastes time, it's better to work through the paper in order.

Record your answers as instructed

Psychometric tests usually come in a multiple-choice format. This means you will be given four or five possible answer choices for each question. Once you have decided which is the correct one, mark the corresponding box or circle on the answer sheet accordingly. An example of how to do this will usually be given at the beginning of the paper.

It is vitally important that you follow these directions precisely. If you are asked to fill in the box or circle, fill it in completely. Don't just make a little squiggle inside it, or tick it or put a cross through it.

Most psychometric tests are marked either by computers using a technique called optical marking, or the test administrators using an 'answer grid' which they lay over the answer sheet.

Either way, if you record your answers in the correct way, the computer (or test administrator) will be able to 'read' them. If you don't, you'll lose points - even if your answers are correct.

Concentrate

Many people find it difficult to concentrate intensely for long periods of time. It isn't easy to block out everything around you and work non-stop for up to an hour without a break.

Even if you are working in a quiet room without disturbance, your mind can start to play tricks on you.

The best way to combat this is to take a very short break. Sit up straight, shut your eyes and take two or three long slow breaths.

Use tried and tested exam techniques

- Try to work out the correct answer before looking at any of the answer choices. That way, even if you can't come up with a definite answer, you'll be able to make an educated guess.
- Narrow your choices by immediately eliminating answers you can see are incorrect.
- If you think a question could be a 'trick' question, think again. Psychometric tests are always straightforward, there are never questions intended to deceive. It could be that you're reading too much into the question; instead try to take it at face value.
- Only change your answer if you are absolutely sure you have answered incorrectly.
- First answers are usually the correct ones.
- Keep working through the paper at a steady pace, keeping an eye on the clock.

Don't panic

You're almost out of time and you've got that horrible sinking feeling that says, 'Help! I'm not going to finish!' - don't panic. Instead, reassure yourself with these facts:

1. You don't have to score 100% to pass. In fact, many organisations set the 'pass' level of their psychometric tests as low as 50%. The whole point of the test is to eliminate candidates who are totally hopeless, so they can concentrate on the rest of you.
2. Many ability-type tests are not designed to be finished in the time set. Giving you more questions than you can reasonably cope with in the allotted time is a deliberate ploy. Taking a psychometric test is meant to be stressful! Afterwards, if any of the other candidates boast about finishing 15 minutes ahead of the rest of the room - they're probably lying.
3. Finally, remember that if you are taking a personality test - there are no wrong answers. With a maths test there is definitely a right and a wrong answer, but with a personality test there isn't such a thing.

4. On Line Testing

An online test is simply a psychometric test you take sitting at a computer console via the Internet. Instead of paper and pencil, it's all mouse action.

Within a few seconds of finishing the test, your score (for an ability test) or the analysis of your personality is emailed to the examiner.

You may be required to undertake the psychometric test at a work station at the employers offices. Sometimes they will send you a hyperlink to an online psychometric testing website and you will complete the tests on line in the privacy of your home.

What type of tests can be taken online?

Personality questionnaires, competency questionnaires, and virtually all ability-type tests. The only type of tests which are difficult to administer via the Internet are the management tests which job applicants do not usually encounter until they are invited to attend an assessment centre appointment.

What are the advantages of online testing?

For you, it means no worries about getting anywhere on time, and no worries about what to wear. As you can take an online test any time of the day or night, you won't need to skip any classes, or even get dressed! Plus, you should find out if the organisation is interested in taking your application any further within a few minutes, which is a million times better than waiting for them to send you a letter.

The obvious advantage to the employer is that the candidate doesn't have come into the office. They can take the test at a recruitment agency, or even in the comfort of their own home. Instead of spending money 'entertaining' large numbers of candidates, the employer can whittle down the numbers without having to lift a finger. Another advantage for international firms is that they can test candidates anywhere in the world.

How does online testing work?

- Simply surf the web site of the company you are interested in applying to.
- Look for a link through to 'recruitment' or if that isn't available, click on 'company information' which normally includes the relevant part of the site.
- Skip through the blurb about how wonderful it is to work there and click on the area of work you're interested in.

4exMilitary Jobs Ltd.

A leading Internet Job Board and Recruitment Consultancy specialising in assisting Ex- Military personnel
Enterprise House, Ocean Village, Southampton. Hampshire SO14 3XB United Kingdom Tele: +44 (0) 23 8023 4964
Fax: +44 (0) 23 8063 6661 E mail: info@4exmilitary.com Web URL : www.4exmilitary.com
Registered in England 7001674

- Follow the instructions on screen, typing your details in the relevant boxes. If the application form asks for a lot of very detailed information, print out a copy and consider your answers carefully before filling in the real form online.
- Once you've registered your details and/or filled in the application form, you will usually receive an acknowledgement and then the assessment process will begin.
- When you get to the test, read the questions carefully and click your answer choices with the mouse. Work quickly because most tests are set to time out after a certain period of time. This is to prevent you consulting your dictionary, your physics manual, or your best mate.
- Make sure you answer all the questions. If there are any you really can't do, take an educated guess. Never leave a question unanswered.
- Within a few seconds of finishing the test, your score (for an ability test) or the analysis of your personality is emailed to the examiner. Tests are usually marked automatically, it is very fast. Many employers will let you know the result within a few days, or even immediately.

Note:

Even if you apply for a job in writing or on the telephone, you may still be directed to an online test before you can progress further with your application. Some companies prefer to give you a date and time for an online test once you've made contact.

4exMilitary Jobs Ltd.

A leading Internet Job Board and Recruitment Consultancy specialising in assisting Ex- Military personnel
Enterprise House, Ocean Village, Southampton. Hampshire SO14 3XB United Kingdom Tele: +44 (0) 23 8023 4964
Fax: +44 (0) 23 8063 6661 E mail: info@4exmilitary.com Web URL : www.4exmilitary.com
Registered in England 7001674