

# International Summer School 2012

**Being successful in the Global Labour Market**

**Session 5: Preparing for and being  
effective at assessment centres Part 1:  
*Focus on Psychometric Testing***



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# Psychometric Testing in Graduate Recruitment

This session aims to help you:

- ▶ improve your understanding of psychometric tests usage in graduate recruitment
- ▶ learn effective techniques for approaching tests
- ▶ find out how to prepare and practise effectively

# Discussion point

- ▶ What do you already know about psychometric testing and what experiences of psychometric testing have you had already?



# Psychometrics explained

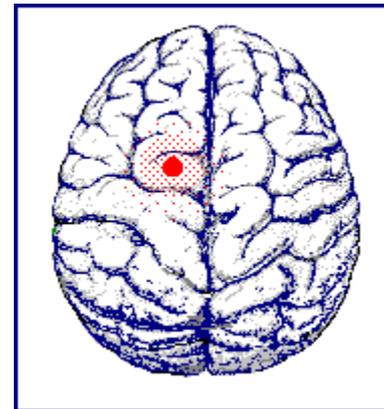
► Career player video clip

<http://www.careerplayer.com/tips-and-advice/general-advice/psychometrics-explained.aspx>

The screenshot displays the Career Player website interface. At the top, there is a navigation bar with links for Register, Log in, Help, and a search box. Below this is a main menu with options: Home, Careers, Tips and advice (highlighted), Job Search, Employers, Psychometrics, and Events. A 'Video quick jump' section is visible below the menu. The main content area features a video player with the SHL logo (People Performance) on the left and a video player in the center. The video player shows the Career Player logo and the text 'Psychometric Testing'. To the right of the video player, there is a sidebar with the text '01. The mysterious world of psychometrics explained'. At the bottom of the video player, there are tags: 'Tags: Aptitude tests, Numerical tests, Personality tests, Psychometrics, Tips and Advice, Verbal tests.' and the 'resource centre' logo.

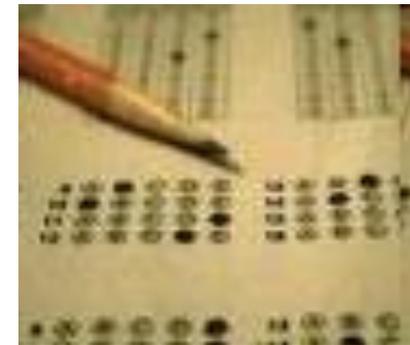
# What are psychometric tests?

- ▶ psycho...+...metric  
(mind...+...measurement)
- ▶ Aim to objectively measure:
  - ▶ your reasoning ability
  - ▶ certain aspects of your personality
- ▶ Structured, exam-like conditions
- ▶ Computer based or pencil and paper
- ▶ Often multiple-choice format



# How are psychometric tests used in recruitment?

- ▶ Various times in recruitment processes:
  - ▶ Initial stages of recruitment – filter for interview invite
  - ▶ Later stages of recruitment – one part of multiple assessment centre exercises
- ▶ Implications of the timing?



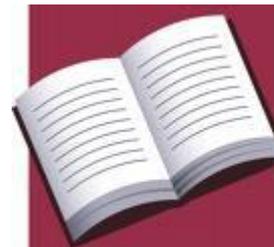
# Who are the main graduate test publishers?



# What types of tests are used?

Three main types of psychometric tests in grad recruitment:

- 1) Aptitude (or ability) tests
- 2) Personality questionnaires
- 3) Situational judgement tests



# Aptitude (or ability) tests

- ▶ Numerical , verbal and diagrammatic reasoning
- ▶ Not tests of general knowledge or intelligence
- ▶ Multiple-choice questions are common
- ▶ Strict timed exam conditions, typically 30 minutes
- ▶ Administered online or by trained staff
- ▶ Right or wrong answers
- ▶ Questions may become progressively difficult

# How are aptitude tests assessed? (1)

- ▶ Usually assessed on number of correct answers
- ▶ “Negative marking”?
- ▶ Number of correct answers compared with the results of a “norm group” (or comparison group)
- ▶ Results are assessed in relation to others in “norm group”, expressed as a percentile
- ▶ Employers tend to have own %ile cut off
- ▶ Online tests: some companies re-test part or all of the test at AC stage

# Example numerical question

## Grant Applications Processed In 1999

Region	Average No. of Applications Processed Daily	Average Daily Applications Processed as % of Previous Year	Operating Costs	Grants Issued
Western	225	90%	315	13500
Southern	336	80%	360	9000
Midlands	765	150%	450	12000
Eastern	627	110%	562.5	18000
Northern	360	75%	180	18000

**1. Which region processed the most grant applications in 1998?**

A) Western    B) Midlands    C) Eastern    D) Northern

# Example verbal question

## **Leading scientists defend animal testing**

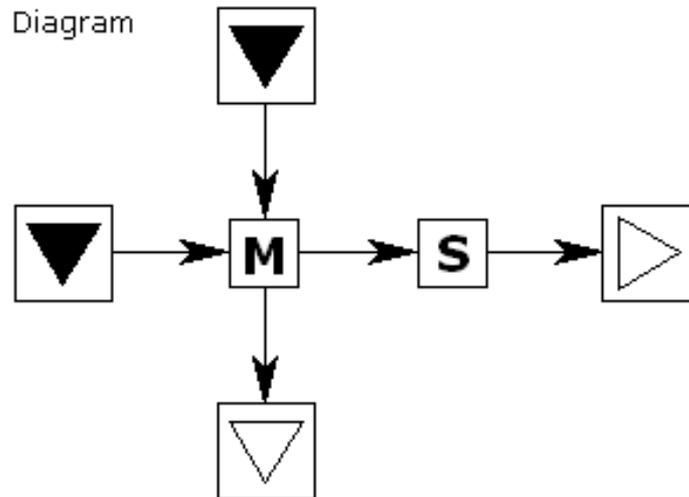
At a recent conference sponsored by a number of leading pharmaceutical companies scientists defended the role of animal testing. The continued use of rabbits, guinea pigs, rats and mice in the development of medicines was strongly endorsed. Many delegates complained that the public did not understand that there were some products which could only be tested on live systems. Also that medical techniques such as kidney transplants would not exist were it not for pioneering animal testing. The conference confirmed that 3000 animals had been used in tests in the previous year.

**Q.** Animal testing is in decline A) True B) False C) Cannot tell

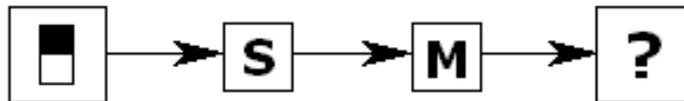
<http://money.guardian.co.uk/work/psychometrics/0,,589733,00.html>

# Example diagrammatic reasoning question

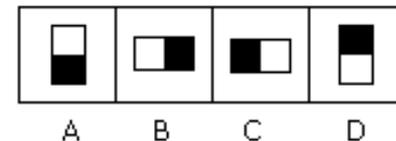
1) The functions 'M' and 'S' transform the input shapes in a certain way. You need to use the diagram to determine what effect each of these functions has. Apply them to the input shape in the question to arrive at the correct output.



Question



Answers



# Performing well in aptitude tests (1)

- ▶ Find out exactly which tests employers are using
- ▶ Use any practice material sent by the employer
- ▶ Notify employer of any additional needs in advance
- ▶ Strike a balance between speed and accuracy, don't spend too long on any one question
- ▶ Keep your eye on the clock
- ▶ Don't worry if you don't finish test
- ▶ Best-guess strategy – eliminate answers that are obviously wrong
- ▶ Practice is more likely to improve your numerical than your verbal skills over a short time scale

▶ Practice is unlikely to improve diagrammatic reasoning

# Performing well in aptitude tests (2)

## Numerical Reasoning

- ▶ Practise basic mental arithmetic with and without and calculator
- ▶ Practise percentages, ratios, fractions and extracting info from graphs and charts (e.g. Finance pages)
- ▶ Math Centre Numeracy Refresher Booklet  
[http://www.mathcentre.ac.uk/students.php/all\\_subjects/numeracy/resources/](http://www.mathcentre.ac.uk/students.php/all_subjects/numeracy/resources/)

## Verbal reasoning

- ▶ Read quality newspapers (Times, Guardian, Independent, Telegraph) and publications such as the Economist more regularly – get a friend to test your understanding
- ▶ Always read the passage thoroughly – don't scan the text at high speed

# Personality questionnaires

- ▶ Assess the different aspects of personality and character which are relevant to the world of work
  - ▶ How you relate to other people
  - ▶ Your ability to deal with your own and others' emotions
  - ▶ Your motivations and determination
  - ▶ Preferred working style
- ▶ “Self-Report” questionnaires
- ▶ No right or wrong answers and not timed - not a test
- ▶ Strongly Disagree to Strongly Agree with statements  
or
- ▶ State which is Most and Least like you

# Example personality questions

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
1. I enjoy meeting new people	1	2	3	4	5
2. I like helping people	1	2	3	4	5
3. I sometimes make mistakes	1	2	3	4	5
4. I don't mind taking risks	1	2	3	4	5
5. I'm easily disappointed	1	2	3	4	5
6. I enjoy repairing things	1	2	3	4	5

# Example personality questions

Circle the answers which are most true for you

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
1. I enjoy meeting new people	1	2	3	4	5
2. I like helping people	1	2	3	4	5
3. I sometimes make mistakes	1	2	3	4	5
4. I don't mind taking risks	1	2	3	4	5
5. I'm easily disappointed	1	2	3	4	5
6. I enjoy repairing things	1	2	3	4	5

Questions from Shavick, A., Management Level Psychometric & Assessment Tests

# Performing well in personality questionnaires

- ▶ Not worth spending time practising personality questionnaires
- ▶ Answer them straightforwardly and honestly, considering work-based scenarios
- ▶ Not advisable to “second-guess” employers preferred answers; may be counter-productive
- ▶ Do you want a job which doesn't suit you?

# Situational judgement tests (SJTs)

- ▶ Relatively new but increasingly used to assess ability to make good judgements in workplace situations
- ▶ Present individuals with work-based scenarios and possible responses which have to be rated as most and least appropriate
- ▶ Response to a situation may be appropriate in one organisation and inappropriate in another – so limited practice effect
- ▶ SJTs can tap into a variety of constructs – ranging from problem solving and decision making to interpersonal skills

# Example situational judgement question

At the end of a busy day at work, you accidentally send an e-mail containing an attachment with some confidential client information to the wrong person.

Which **one** of the following would be the best thing to do?

- ▶ A - Decide to leave the office and deal with any problems tomorrow.
- ▶ B - Decide to overlook your error, send the e-mail to the correct person and leave things like that.
- ▶ C - Immediately send a follow up email to the "wrong" person, or if possible telephone them explaining your mistake. Then send the email to the correct person.
- ▶ D - Find your manager, explain what has happened to them and let them deal with any problems.

<http://www.wikijob.co.uk/wiki/situational-judgement-test>

# Practise the tests

- ▶ Mark Parkinson's comprehensive list of free practise test web-links  
[http://www.markparkinson.co.uk/psychometric\\_links.htm](http://www.markparkinson.co.uk/psychometric_links.htm)
- ▶ SHL free trial tests: [http://www.shldirect.com/practice\\_tests.html](http://www.shldirect.com/practice_tests.html)
- ▶ Graduate First – free aptitude and personality tests: <http://www.graduatesfirst.com/>
- ▶ Assessment Day – free aptitude and SJT tests: <http://www.assessmentday.co.uk/>
- ▶ Targetjobs Careers Report <http://targetjobs.co.uk/careers-report>
  - ▶ Includes numerical, verbal, inductive and deductive reasoning tests
- ▶ eFinancialCareers [http://students.efinancialcareers.co.uk/numerical\\_test.htm](http://students.efinancialcareers.co.uk/numerical_test.htm)
- ▶ Team technology – personality type questionnaire  
[www.teamtechnology.co.uk](http://www.teamtechnology.co.uk)
- ▶ Recommended books
  - ▶ Practice Psychometric Tests, Management Level Psychometric & Assessment Tests – all by Andrea Shavick

# Concluding points

- ▶ Find out as much as you can in advance of testing
  - ▶ Ask the employers which tests will be used and if any practice q's
  - ▶ Inform employer of special needs & discuss reasonable adjustments
- ▶ Familiarise yourself with practise tests available online and in books
- ▶ Practise aptitude tests rather than personality tests and focus on numerical reasoning rather than verbal or diagrammatic
- ▶ Remember that not all employers use psychometric testing as part of their recruitment process