



PRESENTATION:

**Psychometric Tools & Tests: Their Importance in
Employee Selection and Personnel Development**

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Topics

1. Psychometric tests defined
2. Types of psychometric tests
3. Steps in psychometric testing
4. Competency frameworks
5. Psychometric tests in Assessment and Development Centres



Psychometric Tests Defined

- *'any procedure on the basis of which inferences are made concerning a person's capacity, propensity or liability to act, react, experience, or to structure or order thought or behaviour in particular ways'.*

British Psychological Society



Psychometric Tests Defined cont'd

- Psychometric tests are designed and developed by specialist organisations and undergo testing to ensure they are **reliable** (they give similar results each time they are taken) and **valid** (they measure what they say they are measuring) before they are published
- Psychometric tests require qualifications to administer, interpret and feedback results

Psychometric Tests Usages

Psychometric tests are used for:

Selection of candidates

Personal development / identification of training needs /
employee development

Career guidance

Building and developing teams

Why Use Psychometric Tests

The main advantages of using psychometric tests are:

Fast

Cost

Informed
decisions

Objectivity

Clarity

Equality

Fairness

Validity

Identify
T&D
Needs

Enhance
employer
brand

Types of Tests

Aptitude Tests

- Measure how people differ in their ability to perform or carry out different tasks (*these are the type of tests most likely to find at the first stage of a selection process*)

Personality Tests

- Measure how people differ in their style or manner of doing things, and in the way they interact with their environment and other people (*personality*)

Types of Psychometric Tests: Aptitude Tests

- **Aptitude tests**
are designed to assess reasoning or cognitive ability



Aptitude Tests Examples

General Ability

Measures a candidate's general cognitive ability, based on numerical, inductive, verbal and abstract reasoning

Reading Comprehension

Measures a candidate's ability to read, understand and act upon written materials.

Aptitude Tests Examples

Verbal Reasoning

Measures a candidate's ability to evaluate the logic of various kinds of argument as presented in written form

Checking

Measures a candidate's ability to compare information quickly and accurately

Before modern weather forecasts, people relied on their own observations to predict the weather. These observations were often put into rhymes to help people remember them.

A well-known example of a weather rhyme is 'Red sky at night, shepherd's delight; red sky in the morning, shepherd's warning'. This rhyme tells us that if the sky is red in the evening, expect good weather, but if it is red in the morning, expect bad weather. Although a 'red sky' is quite a good indicator of what the weather is going to be, many weather rhymes are not.

Statement: Personal observations can be accurate predictors of the weather.

True ☒

False ☐

Can't tell ☐



That is correct. The passage states that 'Before modern weather forecasts, people relied on their own observations to predict weather'. It also says that the 'red sky' rhyme that came from these observations 'is quite a good indicator of what the weather is going to be'. Therefore, weather can be accurately predicted from personal observations.

Table 1

Company Name	Account Number	Status
Acquisition Global	11456789	Active
Landec Limited	12178957	Inactive
Helios Incorporated	11356790	Active

Table 2

Company Name	Account Number	Status
Acquisition Global	11465789	Active
Landec Limited	12178957	Active
Helios Industries	11356790	Active

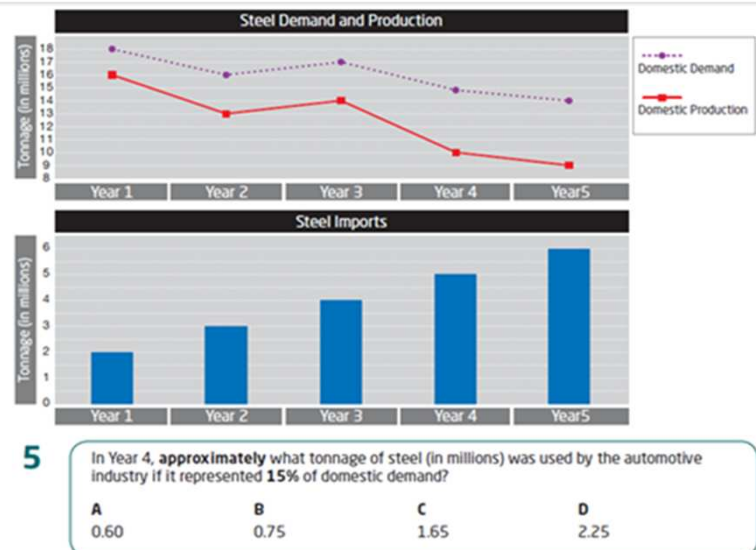
Aptitude Tests Examples

Calculation

Measures a candidate's ability to add, subtract, divide and multiply numbers quickly and accurately

Numerical Reasoning

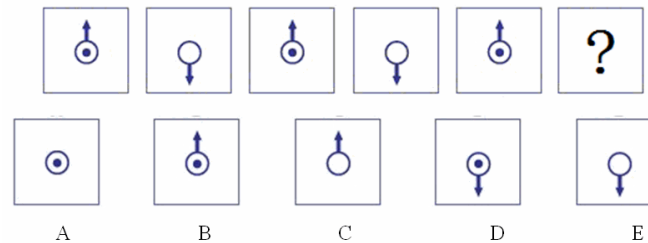
Measures a candidate's ability to make correct decisions or inferences from numerical or statistical data



Aptitude Tests Examples

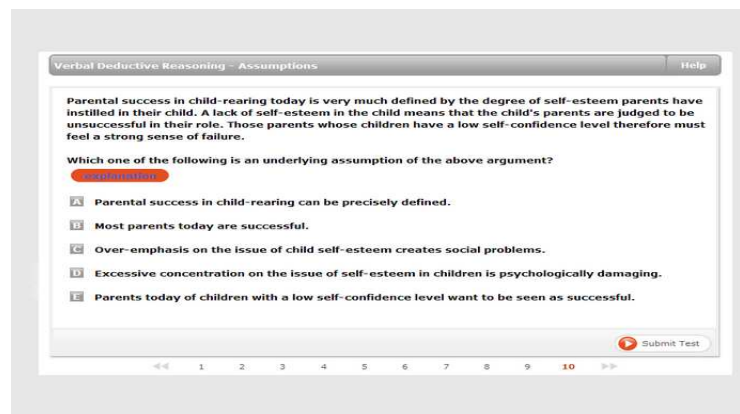
Inductive Reasoning

Measures a candidate's ability to draw inferences and understand the relationships between various concepts, independent of acquired knowledge



Deductive Reasoning

Measures the ability to draw logical conclusions based on information provided, identify strengths and weaknesses of arguments, and complete scenarios using incomplete information

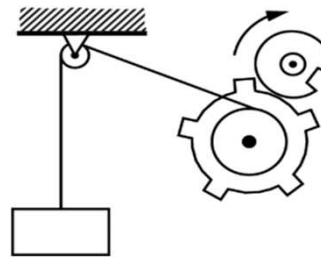


Aptitude Tests Examples

Mechanical Comprehension

Measures a candidate's understanding of basic mechanical principles and their application to devices such as pulleys, gears and levers

44/70 How will a suspended load move if the upper wheel rotates in the arrow direction?



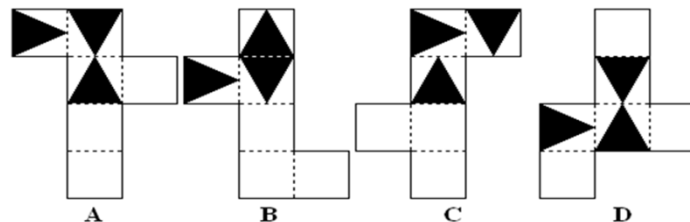
Downwards, in a discontinuous manner

Upwards, in a discontinuous manner

Upwards, in a continuous manner

Spatial Ability

Measures the ability to perceive and transform visual shapes, forms, or images and/or the ability to maintain spatial orientation with regard to objects that may change or move through space



Types of Psychometric Tests: Personality Tests

Personality test is a questionnaire designed to reveal aspects of an individual's personality. There are two different categories of personality questionnaires based on two different personality theories:

The **type** theorists propose that everyone can be divided into discrete categories that are qualitatively different from each other. Thus, a person either belongs or does not belong to a particular category (i.e. MBTI)

Whereas **trait** theory views variation in personality as continuous i.e. a specific personality characteristic will vary in strength along a continuum (OPQ, 16PF, SDI, Hogan, GIOTTO integrity)

Example 2: OPQ

OPQ Manager Plus Report

Competency	1	2	3	4	5	Important for Success?
Leading and Deciding						
1.1 Deciding & Initiating Action						
1.2 Leading & Supervising						
Supporting and Co-operating						
2.1 Working with People						
2.2 Adhering to Principles and Values ¹						
Interacting and Presenting						
3.1 Relating and Networking						
3.2 Persuading & Influencing						
3.3 Presenting and Communicating Information ²						
Analysing and Interpreting						
4.1 Writing & Reporting ²						
4.2 Applying Expertise & Technology ²						
4.3 Analysing ²						
Creating and Conceptualising						
5.1 Learning & Researching ²						
5.2 Creating and Innovating ²						
5.3 Formulating Strategies and Concepts ²						
Organising and Executing						
6.1 Planning & Organising						
6.2 Delivering Results & Meeting Customer Expectations ²						
6.3 Following Instructions & Procedures ²						
Adapting and Coping						
7.1 Adapting and Responding to change						
7.2 Coping with Pressures & Setbacks						
Enterprising and Performing						
8.1 Achieving Personal Work Goals & Objectives						
8.2 Entrepreneurial & Commercial Thinking ²						

Example 1: MBTI



Examples of Self Development Psychometric Tools

	Executive coaching	Leadership Development	Key talent Programmes	General L&D programmes	Team Development	Organisation development	360° Assessment	Below Senior Manager	Above senior Manager
FIRO-B	✓	✓	✓		✓			✓	✓
MBTI Step I	✓	✓	✓	✓	✓			✓	✓
MBTI Step II	✓	✓	✓		✓	✓			✓
Hogan Suite	✓	✓	✓						✓
NEO PI-R	✓	✓							✓
WAVE				✓			✓	✓	✓
Realise2	✓			✓	✓			✓	✓
Standout				✓				✓	✓
Strengthsfinder	✓	✓	✓	✓				✓	✓
VIA Character strengths				✓				✓	
The Leadership Circle suite	✓	✓	✓			✓	✓		✓
Zenger Folkman's Extraordinary Leadership	✓	✓				✓	✓		✓
SDI				✓				✓	
Social Styles				✓				✓	

Steps in Psychometric Testing



Steps in Psychometric Testing



Steps in Psychometric Testing



Steps in Psychometric Testing

Step 3

- Invite candidates / employees by phone and email

Step 4

- Run tests by competent and qualified test administrator(s)

Step 5

- Score and analyse results accurately. This could be done electronically or with a score key by qualified test administrator(s)

Step 6

- Interpret results appropriately. Only by qualified test user(s)

Step 7

- Communicate results to test takers

Step 8

- Review the appropriateness of the test in use

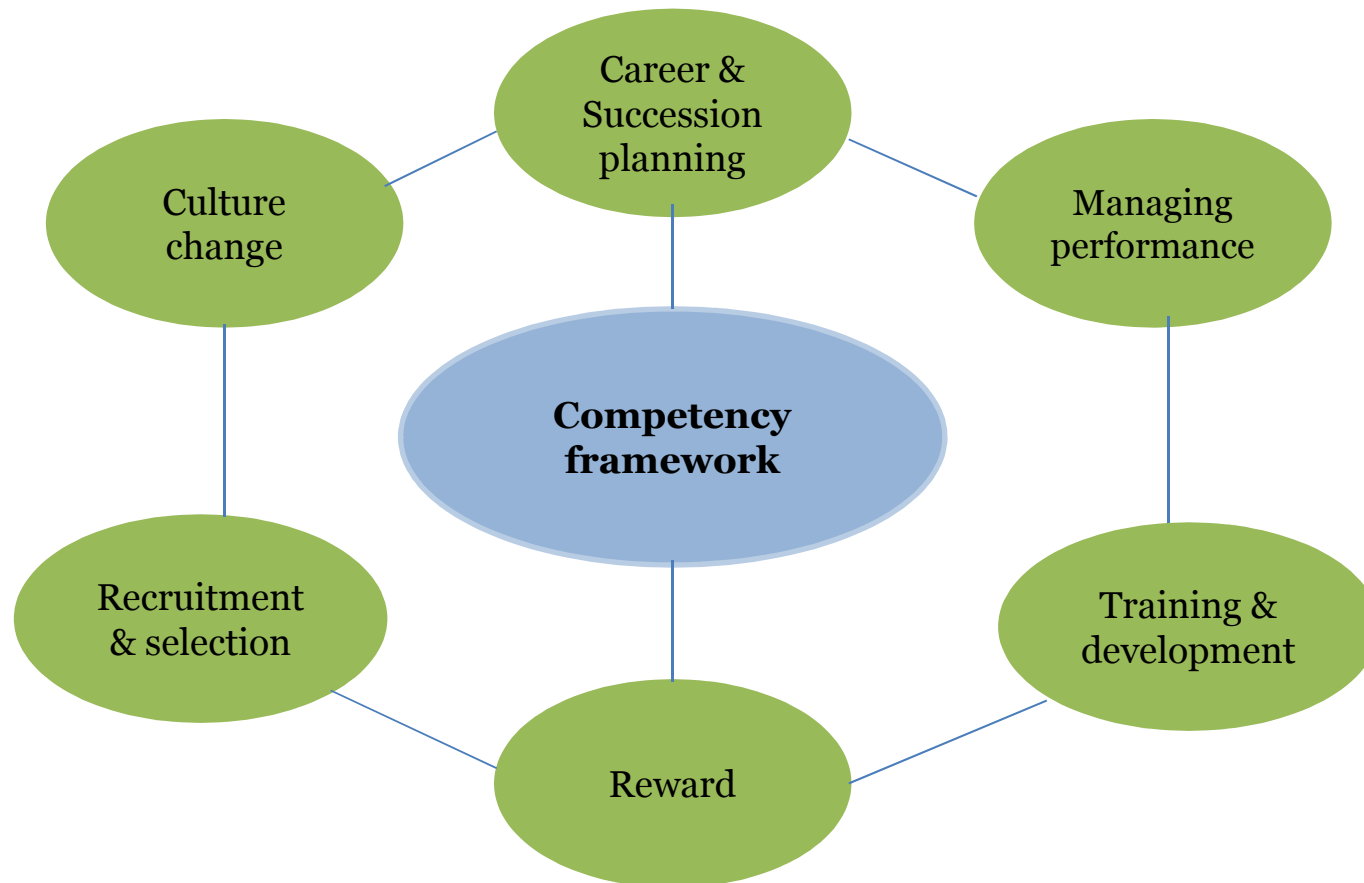
Competency Frameworks



Competency Frameworks

- Competencies are the behavioural indicators of the values, motives, skills and abilities that successful individuals indicate in a specific role
- Provide a framework for assessing and developing deep-seated personal skills
- An individual or a set of individuals at a particular level may be assessed against a competency framework to identify suitability for a certain position and/or development areas

Competency Frameworks



Example of Competency Framework

Competency Title

- 1. Client Orientation (refers to internal and external clients)**
- 2. Results orientation and Effectiveness**
- 3. Teamwork**
- 4. Effective Communication**
- 5. Personal Development and Adaptability**
- 6. Professionalism**
- 7. Integrity and Ethics**
- 8. People Management**

Exercise 1

- Think of a managerial position in your company. Map the key characteristics, competencies, skills, abilities of the position and what else you wish to measure in recruitment.



Assessment and Development Centres



Assessment and Development Centres

- Assessment and Development Centres measure a broader range of knowledge, skills and abilities
- Information is collected and validated through a variety of other tools and methods
- In many cases Assessment and Development Centres are used to identify management potential

Mapping Assessment Tools to the Competencies



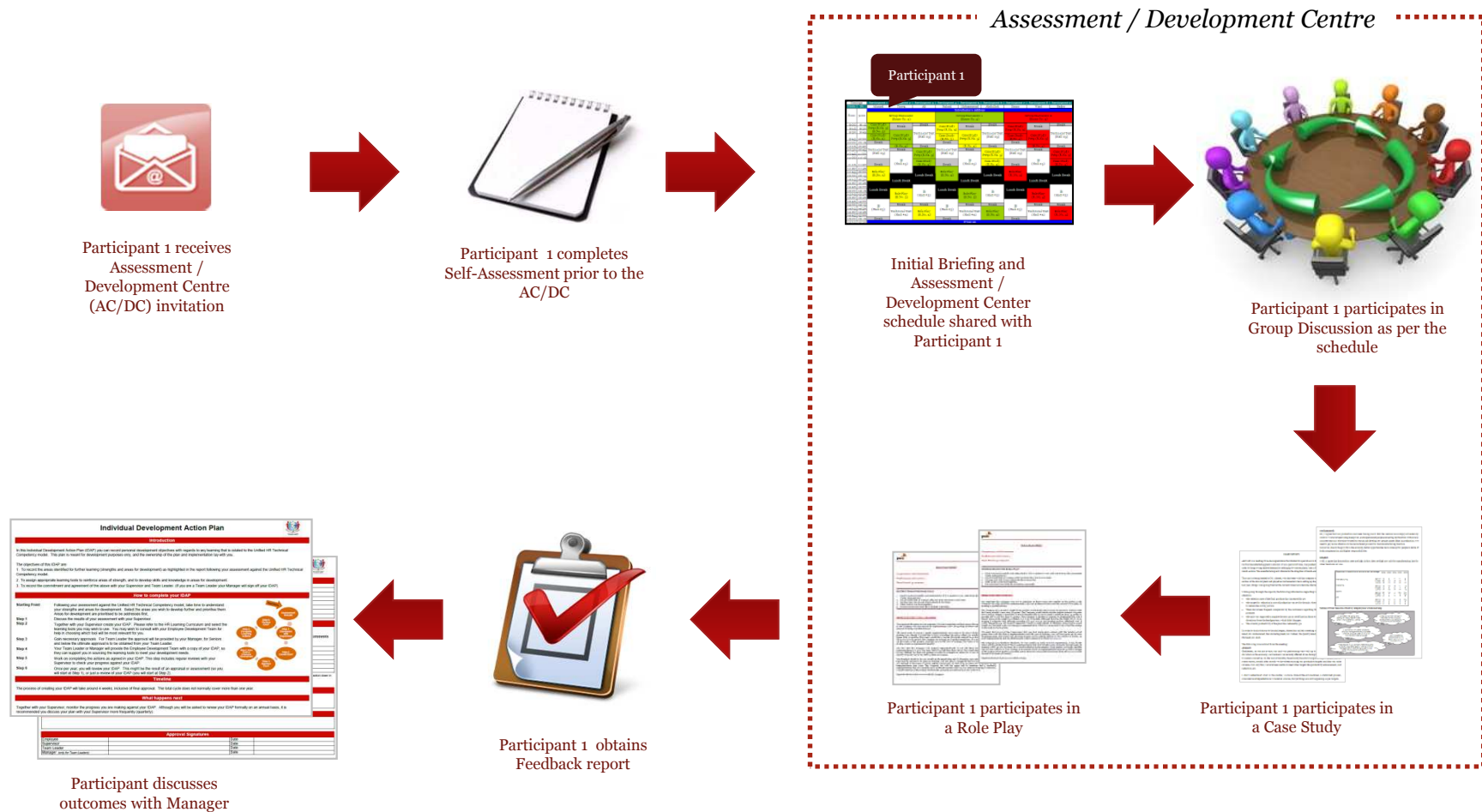
Mapping Assessment Tools to The Competencies

Competency – Tool Matrix

	Assessment Centre Individual Work					Assessment Centre Group Work		Pre-Assessment Centre
Competencies	Case Study	Role Play	In-Tray	Behavioral Interview	E-test	Assigned Group Discussion	Group Simulation / Task	Self Assessment- Personality Questionnaire
Customer Focus	✓			✓			✓	✓
Teamwork	✓				✓	✓		✓
Leadership	✓	✓		✓				✓
Planning and organising	✓				✓		✓	✓
Results orientation	✓	✓					✓	✓
Innovation and change	✓			✓			✓	✓
Communication	✓			✓				✓
Technical skills	✓			✓		✓	✓	✓

Illustration

Illustration of an Assessment / Development Center walk-through for a participant



Exercise 2

- Take the competencies identified during the previous exercise and map the tools which could be used to measure each competency.



Questions – Discussion

