Reasoning Analysis Report

This report is based on the responses given when completing the Reasoning Analysis online questionnaires for Abstract Logic, Understanding Logical Processes, Spatial Reasoning, Social Context and Numerical Reasoning.

Sample

Organisation:

ABC Pty Ltd

Date:

29.10.2018

Background

Under the direction of a team of Registered Psychologists, Extended DISC International developed a Reasoning Analysis assessment in the late 1990's. Having utilised a similar format and question-type in their previous professional practise, the team worked with a number of important existing Extended DISC clients to develop and conduct an initial assessment of 300 participants.

This initial project confirmed what previous research into skills-based reasoning assessments has shown; that there is a high correlation between this type of skills test and performance in related job tasks.

"Cumulative evidence clearly shows that general cognitive ability predicts current performance". Professor David Chan [1] (ranked top 10 most published researchers in the 1990's in the top Industrial and Organizational Psychology journals) demonstrated that general cognitive also predicts future performance.

In a major summary of research findings, Hunter (1986)[2] also showed that '....general cognitive ability has high validity **predicting performance ratings and training success in all jobs**' (p. 359)".

Handbook of Industrial and Organizational Psychology. Volume 1: Personnel Psychology ed. Neil Anderson, Deniz Ones, Handan Kepir Sinangil & Chockalingam Viswesvaran (London, 2001)

[1] Chan, D. (PhD in Industrial and Organizational Psychology from Michigan State University; a Lee Kuan Yew Fellow and Professor of Psychology and Director of the Behavioural Sciences Institute at the Singapore Management University.

[2] Hunter, James E. (1986). Cognitive ability, cognitive aptitudes, job knowledge, and job performance. *Journal of Vocational Behaviour, 29*, 340-362.

Reading Instructions:

This Reasoning Analysis report is based on the responses given in the Reasoning Analysis questionnaires. This has been divided into 5 sections and each section is timed and completed online:

- Abstract Logic (11 minutes)
- Understanding Logical Process (20 minutes)
- Spatial Reasoning (7 minutes)
- Understanding Social Context (11 minutes)
- Numerical Reasoning (9 minutes)

The **Own results** bar graphs shows the percentage of correct answers (of all answers) in each Reasoning Analysis test.

The **Project results** shows the average score of each test assessment done through HR Profiling Solutions reasoning account (sample size is greater than 175 people).

Individual results can also be compared against an Australasian Benchmark and Global Benchmark. This is done as a complimentary report.   If you would like to order this report, please contact HR Profiling Solutions Ltd.

Abstract Logic

Abstract Logical Reasoning measures the individual's ability to understand the interrelationship between different concepts and to combine them on a higher level under one concept.

It reflects the person's ability to understand how different phenomenon relates to each other. It also measures how well the person understands "the big picture" and which components it consists of. It correlates with general learning skills, but can also be developed over time.

- ability to understand "the big picture" by connecting different concepts
- memory to recall frame of reference
- general learning skills which can be developed

Reasoning (Own results)

Abstract Logical Reasoning

| 0 | 20 | 40 | 60 | 80 | 100 |

90%

Reasoning (Project results)

Abstract Logical Reasoning

| 0 | 20 | 40 | 60 | 80 | 100 |

58%

The implications of low / high scores for Abstract Logic

A low score (<20% could indicate this person is slow in seeing trends and identifying critcal decision factors. They may analyise too much and look into unnecessary details.

A high score (>80% could indicate this person is able to connect seemingly unrelated matters to form "the big picture". They may be quick to filter out irrelevant factors in making a decision.

Abstract Logic and corresponding tasks

Planning, organising, delegating, policy administration, data analysis, customer analytics, creating systems.

Understanding Logical Processes

Understanding Logical Processes measures the individual's ability to understand cause-effect relationships. It reflects the person's ability to understand how the information available influences the future and what the consequence of the present information could be.

It measures how systematic the person's thinking process is. It correlates with general learning skills, but is not that easy to be developed over time.

- ability to understand cause-effect relationship
- deductive logic to unlearn and think systematically
- general learning skills, but is not easy to develop

Reasoning (Own results)

Understanding Logical Processes
88%

| 0 | 20 | 40 | 60 | 80 | 100 |

Reasoning (Project results)

Understanding Logical Processes
50%

| 0 | 20 | 40 | 60 | 80 | 100 |
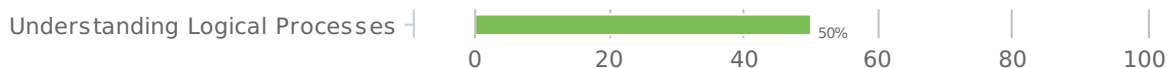
Implications of low / high score for Understanding Logical Process

A low score (<20% could indicate this person can get defensive when pushed to figure out the next action or step in solving a complex problem. They could stick rigidly to past experiences when solving new problems.

A high score (>80% could indicate this person is good at solving new complex problems. They could be quick in identifying root causes to precisely address a conflict situation or an objection. They can get impatient with others.

Understanding Logical Processes and corresponding tasks

Problem solving, negotiation, business judgement, Q & A, handling objections, research, predicting and / or influencing behaviour.

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Spatial Reasoning

Spatial Reasoning measures the individual's ability to comprehend visual entities and the components they consist of. It reflects the person's ability to manage the information collected by visual perception.

Spatial Reasoning skills are often connected to the skills required by architects and visual designers.

- ability to comprehend visual entities
- mechanical logic to manage visual perception
- correlates with process management

Reasoning (Own results)

Spatial Reasoning	75%

0   20   40   60   80   100

Reasoning (Project results)

Spatial Reasoning	39%

0   20   40   60   80   100

The implications of a low / high score for Spatial Reasoning

A low score (<20% could indicate this person is weak in imagination and get stressed with mapping multiple workflows concurrently. They depend heavily on physical drawings and process flowcharts.

A high score (>80% could indicate this person understands how processes are interrelated and are able to spot appropriate control / check points. They would be quick in identifying risk factors in planning and execution.

Spatial Reasoning and corresponding tasks

Process management, interior design, visual design, research, organisational restructuring, engineering.

Understanding Social Context

Understanding Social Context measures the individual's general sensitivity in observing social phenomena. It reflects the person's ability to sense conflict situations and to reason how interpersonal relationships influence a situation.

It correlates with the skills needed in jobs that require social understanding and an ability to respond according to how the social interactions develop.

- ability to sense and observe social phenomenon
- social adjustment to manage conflict situations
- correlates with interpersonal savvy

Reasoning (Own results)

Understanding Social Context
50%
0   20   40   60   80   100

Reasoning (Project results)

Understanding Social Context
33%
0   20   40   60   80   100

The implications of low / high scores for Understanding Social Context

A low score (<20% indicates this person could possibly provoke more hostility when in a conflict situation. They could get or be too blunt / naive towards others. They may also deny or get defensive when faced with strong confrontation.

A high score (>80% could indicate this person is very alert in reading between the lines and predict the reactions of others. They could be self critical and may be judgmental.

Understanding Social Context and corresponding tasks

People relations, public speaking, counselling, negotiation, team management, presentation, selling.

Numerical Reasoning

Numerical Reasoning measures the individual's ability to perceive the relationships between numerical information.

It correlates with the skills needed in jobs that require a person to follow a logic presented by numbers.

- ability to understand numerical relationships
- mathematical thinking to see trends
- correlates with numerical analysis

Reasoning (Own results)

Numerical Reasoning — 57%

| 0 | 20 | 40 | 60 | 80 | 100 |

Reasoning (Project results)

Numerical Reasoning — 54%

| 0 | 20 | 40 | 60 | 80 | 100 |

The implications of low / high scores for Numerical Reasoning

A low score (<20% could indicate this person gets disengaged quickly from numbers that appear massive. They may not be willing to concentrate on problems involving numerical manipulation.

A high score (>80% could indicate this person can analyse trends involving numbers with ease. They may conduct feasibility studies and be quick to spot inconsistencies.

Numerical Reasoning and corresponding tasks

Performance tracking, data analysis, stock taking, tabulation, "number crunching", accounting, statistics.

Functional Jobs and critical reasoning abilities					
	Abstract	**Logical**	**Spatial**	**Social**	**Numbers**
Sales (promoter, entrepreneur, negotiator, headhunter)	●	●		●	
Service (customer relations, teaching, retail, management)	●	●		●	
Development (marketing, engineering, operations, investment)		●	●		●
Administration (coordinator, accounting, risk management, call centre)	●	●		●	
Creative (advertising, PR, communication, counselling)	●		●	●	

Business competencies and critical reasoning abilities					
	Abstract	**Logical**	**Spatial**	**Social**	**Numbers**
Customer focus	●	●			●
Informing	●	●		●	
Execution	●	●			●
Innovation management	●	●	●		
Building effective teams	●	●		●	
Managing and measuring work		●	●		●
Managing vision and purpose	●	●		●	
Managing talents	●	●			
Change management	●		●	●	

Reasoning abilities and corresponding tasks	
Abstract Logic	Planning, organising, delegating, policy administration, data analysis, customer analytics, creating systems
Logical Processes	Problem solving, negotiation, business judgement, Q & A, handling objections, research, predicting and / or influencing behaviour
Spatial Reasoning	Process management, interior design, visual design, research, organisational restructuring
Social Context	People relations, public speaking, counselling, negotiation, team management, presentation
Numerical Reasoning	Performance tracking, data analysis, stock taking, tabulation, "number crunching", accounting, statistics

Thank you for completing the Reasoning Analysis Test and obtaining this report.