

# Sam Sample 27 Mar 2013





## REPORT STRUCTURE

The Standard Report presents Sam Sample's results in the following sections:

#### 1. Guide to Using This Report

- Introduction
- The Standard Report
- Supplementary Reports
- Reference Group (Norms) Used
- Understanding the Charts and Tables

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- Result Description
- Results Chart

#### 3. Numerical Reasoning

- Scale Description
- Result Description
- Results Chart

#### 4. Abstract Reasoning

- Scale Description
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#### 5. Results Summary

- Internet Reasoning Test Profile
- General Mental Ability Profile

#### **DISCLAIMER**

This is a strictly confidential assessment report on Sam Sample which is to be used under the guidance of a trained professional. The information contained in this report should only be disclosed on a 'need to know basis' with the prior understanding of Sam Sample.

The results must be interpreted in the light of corroborating evidence gained from feedback and in the context of the role in question taking into account available data such as performance appraisals, actual experience, personality preferences, motivation, interests, values and skills. As such the authors and distributors cannot accept responsibility for decisions made based on the information contained in this report and cannot be held directly or indirectly liable for the consequences of those decisions.





## **GUIDE TO USING THIS REPORT**

#### INTRODUCTION

The Internet Reasoning Test (IRT3) measures the ability to reason using words, numbers and abstract concepts. It has been specifically designed to discriminate between candidates of average ability, whose aptitude is being assessed for graduate level employment or higher level training. Reasoning tests in the format of the Internet Reasoning Test have consistently been found to be the best single predictor of job performance and trainability in roles that require a high level of general mental ability. Combining reasoning test scores with the results from personality tests can further improve the prediction of job performance, as can the use of job sample tests and structured interviews. In roles where experience and acquired knowledge are central to effective performance, it may be particularly appropriate to combine information obtained from reasoning tests with that obtained from these latter sources.

The Internet Reasoning Test assess the candidate's capacity (a composite of speed and accuracy) to perceive logical patterns and relationships in new material he has not previously encountered, and deduce the logical consequences of these (i.e. logical deductive reasoning). This incorporates the ability to: learn and understand complex new material; use logic to develop arguments that are rational and well-reasoned; deduce the logical consequences of a given set of rules, assumptions or relationships.

The Internet Reasoning Test assesses serial deductive reasoning, rather than holistic deductive reasoning; namely the ability to understand the logical relationships that govern patterns that change along one dimension, rather than the ability to understand logical patterns that develop simultaneously over a number of independent dimensions. As such, the abilities the Internet Reasoning Test assesses (verbal, numerical and abstract serial deductive reasoning) are most directly relevant to roles that require the candidate to make a series of rational decisions that follow sequentially, one after another. While being relevant to all jobs that require a high level of mental acuity, the abilities the Internet Reasoning Test assesses are slightly less directly relevant to roles that might require the candidate to accurately perceive and understand logical patterns holistically (i.e. to understand patterns that change simultaneously over a number of different dimensions), and to think strategically, with these latter skills being more directly assessed by matrix reasoning tests such as the ART.

The additional diagnostic (raw) scores, which are provided after the profile chart for each of the Verbal, Numerical and Abstract Tests, enable assessors to establish the respondent's test taking style. These provide additional information which allows assessors to determine the trade-off the candidate has made between speed (Percentage Items Attempted) and accuracy when responding to the test items. Assessors should be mindful of the need to interpret these raw scores in the context of the candidate's scaled (stanine or percentile) score on each subtest, as **both** accuracy and speed will increase for higher scorers.

#### THE STANDARD REPORT

The standard report provides a detailed breakdown of the respondent's performance across the sub-scales using narratives and profile charts.





#### SUPPLEMENTARY REPORTS

The information gained from this report can be used in conjunction with other supplementary reports. The supplementary reports available for the Internet Reasoning Test are:

#### **Results Spreadsheet**

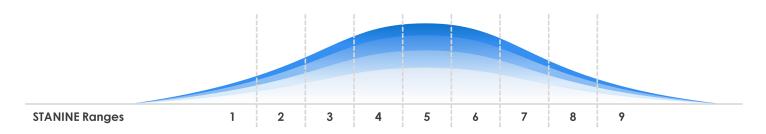
The results spreadsheet provides a summary of the respondents' results across the sub-scales in the form of a spread sheet.

#### **Respondent Feedback Report**

The feedback report is intended for sharing directly with respondents for their personal insight. It provides a breakdown of the respondent's performance across the sub-scales using simplified narratives.

#### REFERENCE GROUP (NORMS) USED

A reference group is used to evaluate Sam's results. His results are presented as standardised STANINE scores with Mean=5 and SD=2 as demonstrated in the following chart.



The following norms were used to generate this report:

Test	Norm Used	Sample Size
Verbal Reasoning (VR3)	Working Age Adults	1324
Numerical Reasoning (NR3)	Working Age Adults	1596
Abstract Reasoning (AR3)	Working Age Adults	770





#### **UNDERSTANDING THE CHARTS AND TABLES**

Much of the information presented in this report is presented in the form of charts or tables, which is why it is important to be able to read them accurately and make use of the information contained within them. The following elements are used to present the data in the charts and tables:

Element	Description
Raw	The Raw score is simply the (un-scaled) sum of correct responses the respondent receives on the test scale.
Attempted (Att.)	Is the number of questions the respondent has attempted to answer regardless of whether the answers were correct or not.
STANINE Score	Is a standardised scale used to compare respondent results. The STANINE Score has a Mean of 5 and Standard Deviation of 2. This score is presented as a 9-point scale in the results chart.
Standard Error of Measurement (SEm)	The Standard Error of Measurement is a measure of the range within which an individual's hypothetical 'true' score is likely to fall within 68% probability. It is presented as blue error bar surrounding the respondent's obtained STANINE score in the results chart.
T Score	Is another standardised score used to compare respondent results. It is similar to the STANINE score, though has a Mean of 50 and Standard Deviation of 10. This score is presented as a numerical value in the results chart.
Percentile Score (%ile)	A value which reflects the percentage of people in a sample who score below a given raw score. This score is presented as a numerical value between 0 and 100 in the results chart.
Percentage Items Correct	Is the percentage of the number of correct responses over total number of items.
Percentage Items Attempted	Is the percentage of the number of items attempted over total number of items.
Percentage Accuracy	Is the percentage of the number of correct responses over the number of items attempted.





## **VERBAL REASONING**

#### **Scale Description**

The verbal component of the Internet Reasoning Test assesses a person's ability to use words in a logical way. Consisting of items which involve an understanding of vocabulary, class membership and the relationships between words, this test measures the ability to perceive and understand concepts and ideas expressed verbally. While this test is a measure of reasoning ability rather than educational achievement, it is nonetheless generally recognised that verbal reasoning test scores are sensitive to educational factors.

#### **Result Description**

Compared to the chosen reference group, Sam Sample's performance on the verbal component of this test indicates that he has an above average level of ability to understand complex verbal concepts and ideas, to perceive the relationships between these and deduce their logical consequences. Such a score suggests that his verbal reasoning ability is likely to exceed that of many staff in general level employment. He has demonstrated an ability to use words in a logical and rational way, and to accurately perceive the logical relationships that link different verbal concepts.

Sam Sample's performance on the verbal component of this test suggests that he has a good command of language and an ability to formulate logical, reasoned arguments. Having a level of verbal reasoning ability that is well above average (in comparison with the chosen reference group), he would be expected to be able to understand the logic of fairly complex arguments and use words in quite a rational and well-reasoned way. Consequently, he should be able to understand complicated instructions and explanations with relative ease and be able to explain quite difficult concepts and ideas to others with clarity. He is likely to be able to learn fairly complex verbal material more quickly than many (general level) staff and to grasp new ideas relatively quickly. As a result, he would be expected to be able to benefit from training and development programmes that require a good level of verbal ability, and which require participants to learn relatively complex new (verbal) material.

RE	ESULTS CHART									
Scale	Description	Raw	Att.	1 2 3	4 5 6 7	8 9	T Score	%ile		
VR3	Verbal Reasoning	14	17		7		60	83		
Norm Used: Verbal Reasoning (VR3) = 1324 Working Age Adults										
Scale	Description	Percentage Items Correct		Percenta Attem		Percentage Accuracy				
VR3	Verbal Reasoning	82		10		82				





## **NUMERICAL REASONING**

#### **Scale Description**

The numerical component of the Internet Reasoning Test assesses a person's ability to use numbers in a logical and rational way. The test consists of items which assess the candidate's understanding of number series, numerical transformations, the relationships between numbers and their ability to perform numerical computations.

#### **Result Description**

Sam Sample's performance on the numerical component of this test indicates that he has an average level of numerical ability when compared to the chosen reference group. This suggests that he is likely to be as able as most people in general level employment to perceive the logical patterns and relationships between numbers, to understand the rules that govern these patterns and to deduce their logical consequences. While this suggests that he has a reasonable understanding of numbers and their relationships, it may nonetheless take him a little longer than some of the highest calibre (general level) staff to fully appreciate the more subtle numerical/mathematical concepts and ideas.

Sam Sample has demonstrated that he is as able as most staff (in general level employment) to work with numbers in a fairly logical and rational way, and to carry out moderately complex numerical operations with a reasonable degree of accuracy. He might however be expected to experience a little more difficulty than the highest calibre staff in understanding the logic underpinning the most difficult numerical problems, and in carrying out particularly complex numerical operations. He should be able to cope with routine numerical work without undue difficulty, and he should be more than able to benefit from further relevant training. He is however likely to experience some difficulty fully understanding more complex numerical/mathematical ideas.

RE	SULTS CHART									
Scale	Description	Raw	Att.	1 2 3 4 5 6 7 8	3 9 T Score	%ile				
NR3	Numerical Reasoning	11	12	5	48	43				
Norm Used: Numerical Reasoning (NR3) = 1596 Working Age Adults										
Scale	Description	Percentage Items Correct		Percentage Items Attempted	Percentage Accuracy					
NR3	Numerical Reasoning	65		71	92					





## **ABSTRACT REASONING**

#### **Scale Description**

The abstract component of the Internet Reasoning Test assesses the ability to understand complex concepts and assimilate new information outside of previous experience. The test consists of items which require the recognition of patterns and similarities between shapes and figures. As a measure of reasoning it is independent of educational attainment and can be used to provide an indication of intellectual potential. Assessing the ability to quickly understand and assimilate new information it is likely to predict how responsive to training the person will be.

### **Result Description**

Sam Sample's score on the abstract component of this test indicates that, with respect to the chosen reference group, he has an average level of natural (i.e., untutored) reasoning ability. This suggests that his level of fluid reasoning ability is likely to be as high as that of most staff in general level employment. He has demonstrated an average level of ability (with respect to the chosen reference group) to be able to perceive abstract logical patterns and relationships between novel material, and be able to correctly identify these patterns and deduce the consequences of them using pure logic (i.e., without calling upon other information such as his vocabulary, knowledge of mathematical operations, etc.)

While Sam Sample would be expected to be able to grasp new concepts and ideas without great difficulty, it is likely to take him a little longer than it would take many of the highest calibre staff to fully appreciate the finer points of more complex logic. He should, however, be able to learn routine material as easily as most other (general level) staff. As a result, he should be able to benefit from training programmes that require a reasonable level of ability understand logical relationships and learn abstract concepts.

RE	SULTS CHART										
Scale	Description	Raw	Att.	1	2 3	4 5	6 7	7 8	9	T Score	%ile
AR3	Abstract Reasoning	10	15				6			51	52
Norm Used: Abstract Reasoning (AR3) = 770 Working Age Adults											
Scale	Description	Percentage Items Correct		Percentage Items Attempted			;	Percentage Accuracy			
AR3	Abstract Reasoning	59		88				67			





## **RESULTS SUMMARY**

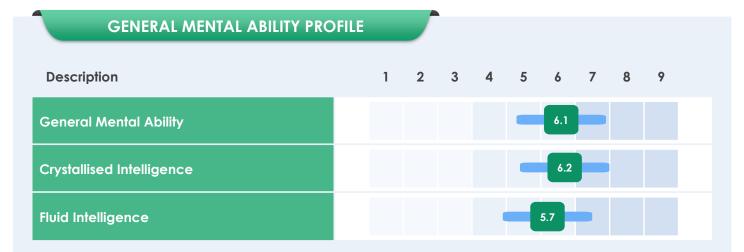
1		INTERNET REASONING TEST PI	ROFILE		^		
Sc	ale	Description	Raw	Att.	1 2 3 4 5 6 7 8 9	T Score	%ile
V	'R3	Verbal Reasoning	14	17	7	60	83
N	IR3	Numerical Reasoning	11	12	5	48	43
A	\R3	Abstract Reasoning	10	15	6	51	52

#### **Norms Used:**

Verbal Reasoning (VR3) = 1324 Working Age Adults Numerical Reasoning (NR3) = 1596 Working Age Adults Abstract Reasoning (AR3) = 770 Working Age Adults







**General Mental Ability –** often termed 'g' – is defined as a person's capacity to: understand logic; comprehend and learn complex new material; think abstractly; solve problems; plan and respond to the environment in an adaptive, rational and flexible manner. It is termed General Mental Ability because it assesses the person's mental capacity across a wide range of different intellectual functions and modalities (i.e. it is not specific to that person's verbal, abstract or numerical reasoning ability, etc.). It is a composite of the speed and accuracy with which the person performs mental tasks, and can therefore be viewed as a measure of a person's 'mental power'.

**Crystallised Intelligence –** often termed 'Gc' – is defined as a person's capacity to accumulate knowledge and intellectual skills, and learn from experience. It involves acquiring new ideas, information and mental skills, and using these to understand the environment and respond to it in a logical and rational way. It is a function of the speed and accuracy with which the person can perform such mental tasks and use acquired knowledge and competencies in an adaptive manner.

**Fluid Intelligence** – often termed 'Gf' – is defined as a person's capacity to create meaning out of confusion. It involves the ability to: solve novel problems in a rational way, perceive patterns and relationships in new material and deduce the logical consequences of such patterns. It is a function of the speed and accuracy with which the person performs such mental tasks, with this ability being used whenever a person is required to respond to a novel intellectual task or problem.