PSYTECH
INTERNATIONAL

Sam Sample
27 Mar 2013

EXPERT

STANDARD REPORT

GENERAL REASONING TEST

ABILITY
GRT2

WWW.PSYTECH.COM

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

2. Verbal General Reasoning
- Scale Description
- Result Description
- Results Chart

3. Numerical General Reasoning
- Scale Description
- Result Description
- Results Chart

4. Abstract General Reasoning
- Scale Description
- Result Description
- Results Chart

5. Results Summary
- General Reasoning 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 General Reasoning Test (GRT2) assesses 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 general level employment and training. Tests such as the General Reasoning Test have consistently been found to be the best single predictor of both performance and trainability in roles that require a good 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 General Reasoning Test assesses 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 General 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 General 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 good level of mental acuity, the abilities the General Reasoning Test assesses are slightly less directly relevant to roles that 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.

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 General Reasoning 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 General Reasoning Test are:
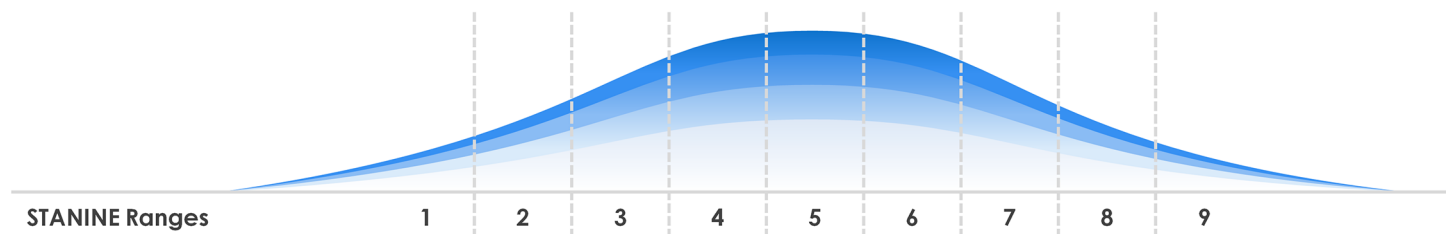
Group Report

The Group Report 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.

STANINE Ranges   1   2   3   4   5   6   7   8   9

The following norms were used to generate this report:

Test	Norm Used	Sample Size
Verbal General Reasoning (VR2)	General Population	4494
Numerical General Reasoning (NR2)	General Population	4494
Abstract General Reasoning (AR2)	General Population	4494

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 (unscaled) sum of correct responses the respondent recieves 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 (SE*m*)	The Standard Error of Measurement is a measure of the range within which an individual's hypothetical 'true' score is likely ot 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 items attempted over the number of correct responses.

VERBAL GENERAL REASONING

Scale Description

The Verbal General 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 Reasoning Test indicates that he has a 'slightly above average' level of verbal reasoning ability. This suggests that he should be at least as able as (if not slightly more able than) most staff in general level employment to understand complex verbal concepts and ideas, to perceive the relationships between these and deduce their logical consequences. He has demonstrated an ability to use words in a fairly logical and rational way, and to be able to perceive the logical relationships that link different verbal concepts.

Sam Sample's performance on the Verbal Reasoning Test suggests that he has a fairly good command of language and an ability to formulate fairly rational arguments. Consequently, he should be able to understand relatively complicated instructions and explanations without great difficulty, and should be able to develop reasonably logical arguments. Although it might take him a little longer than it may take some particularly high calibre staff to fully appreciate the subtitles of very complex arguments, he should nonetheless be able to explain the vast majority of ideas with a fair degree of clarity and with relative ease. He is likely to learn complex verbal material at least as quickly as most other (general level) staff, and to be able to grasp new ideas relatively easily. As a result, he would be expected to be able to benefit from training and development programmes that require a reasonable level of verbal ability and which require participants to learn reasonably complex new (verbal) material.

RESULTS CHART

Scale	Description	Raw	Att.	1 2 3 4 5 6 7 8 9	T Score	%ile
VR2	Verbal General Reasoning	25	35	6	54	64

Norm Used:
Verbal General Reasoning = 4494 General Population

Scale	Description	Percentage Items Correct	Percentage Items Attempted	Percentage Accuracy
VR2	Verbal General Reasoning	71	100	71

NUMERICAL GENERAL REASONING

Scale Description

The Numerical General 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 Reasoning Test suggests that he has a 'well above average' level of ability to understand numerical concepts, compared to the chosen reference group. The score he obtained on this test indicates that his level of numerical reasoning ability is likely to exceed that of many staff in general level employment. He has demonstrated an ability to accurately perceive the logical patterns and relationships between numbers, to be able to understand the rules that govern these patterns and deduce the logical consequences of them.

In a broader context, this suggests that Sam Sample has a fairly good level of understanding of numbers and how they are related to each other, and an ability to grasp relatively complex numerical/mathematical concepts. He has demonstrated an ability to work with numbers in quite a logical and rational way, to be able to carry out numerical operations fairly accurately and to be able to solve reasonably complex numerical problems. This suggests that he should be able to cope with the demands of most general level jobs that require working with numbers, without difficulty. Moreover, with appropriate training he should have a sufficient level of numerical ability to be able to acquire higher level numerical skills.

RESULTS CHART

Scale	Description	Raw	Att.	1 2 3 4 5 6 7 8 9	T Score	%ile
NR2	Numerical General Reasoning	23	25	7	60	84

Norm Used:
Numerical General Reasoning = 4494 General Population

Scale	Description	Percentage Items Correct	Percentage Items Attempted	Percentage Accuracy
NR2	Numerical General Reasoning	92	100	92

ABSTRACT GENERAL REASONING

Scale Description

The Abstract General 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 Reasoning Test is within the top 15% of the chosen reference group, suggesting that he has an 'excellent' level of fluid or 'natural' (i.e., untutored) reasoning ability. This suggests that his level of fluid reasoning ability is likely to be in excess of that of most staff in general level employment. He has demonstrated a good level of ability to perceive abstract logical patterns and relationships between novel material he has never encountered before, to correctly identify these patterns and deduce the consequences of them using pure logic (i.e., without calling upon other knowledge/information such as his vocabulary, knowledge of mathematical operations, etc.).

Sam Sample's performance on the Abstract Reasoning Test suggests that he has a good ability to grasp new concepts and ideas outside of his previous realm of experience, and to understand abstract logic (i.e., logical relationships which are not contextualised). This should enable him to quickly understand new material, even if it is complex and abstract in nature. He is likely to learn complicated, intellectually demanding material much more quickly than most (general level) staff, and as a result he should be able to put further training and development to good use.

RESULTS CHART

Scale	Description	Raw	Att.	1 2 3 4 5 6 7 8 9	T Score	%ile
AR2	**Abstract General Reasoning**	**24**	**25**	8	**65**	**93**

Norm Used:
Abstract General Reasoning = 4494 General Population

Scale	Description	Percentage Items Correct	Percentage Items Attempted	Percentage Accuracy
AR2	**Abstract General Reasoning**	**96**	**100**	**96**

RESULTS SUMMARY

GENERAL REASONING PROFILE

Scale	Description	Raw	Att.	1 2 3 4 5 6 7 8 9	T Score	%ile
VR2	Verbal General Reasoning	25	35	6	54	64
NR2	Numerical General Reasoning	23	25	7	60	84
AR2	Abstract General Reasoning	24	25	8	65	93

GENERAL MENTAL ABILITY PROFILE

Scale	Raw	1 2 3 4 5 6 7 8 9
General Mental Ability	7.2	7.2
Crystallised Intelligence	6.4	6.4
Fluid Intelligence	7.7	7.7

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.