ARABIAN ASSESSMENT & DEVELOPMENT CENTRE

Sam Sample

EXPERT

STANDARD REPORT

GRADUATE REASONING TEST

ABILITY
GRT1

POWERED BY
PSYTECH GeneSys

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REPORT STRUCTURE

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

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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 Graduate Reasoning Test (GRT1) measures the ability to reason using words, numbers and abstract concepts. It has been specifically designed to discriminate between candidates of above average ability, whose aptitude is being assessed for graduate level employment or higher level training. Reasoning tests in the format of the Graduate 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 Graduate 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 Graduate 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 Graduate 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 Graduate 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 Graduate Reasoning Test are:

Results Spreadsheet

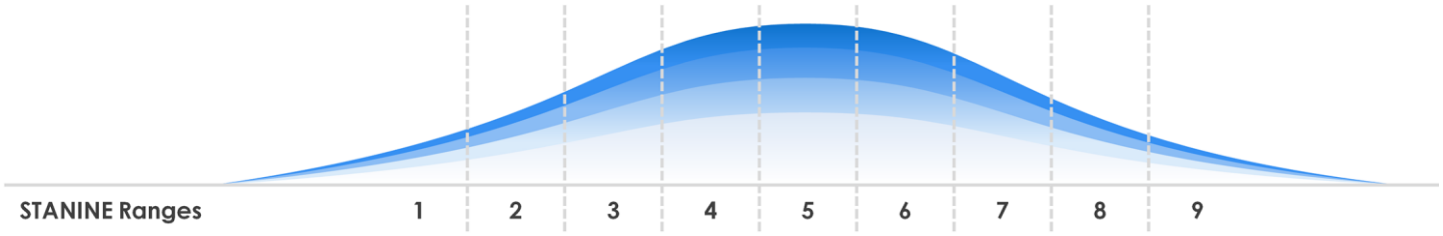
The results spreadsheet provides a summary of the respondents' results across the sub-scales in the form of a spread sheet.

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 (VR1)	Bachelor's Degree Graduates (China)	646
Numerical Reasoning (NR1)	Bachelor's Degree Graduates (China)	633
Abstract Reasoning (AR1)	Bachelor's Degree Graduates	4069

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

Verbal Reasoning 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 a low level of verbal reasoning ability. This suggests that his verbal reasoning ability is likely to be weak in comparison with that of most graduate calibre staff. His performance on the GRT1 indicates a low level of ability (in comparison with the chosen graduate reference group) to understand verbal concepts, to perceive the relationships between these and deduce their logical consequences. While his command of language is not likely to be unduly poor, he is nonetheless likely to experience difficulty fully appreciating subtle shades of meaning. As a result, he is likely to be significantly less able than most graduates to formulate logical, well-reasoned arguments.

Sam Sample is likely to experience some difficulty comprehending the logic underpinning complex arguments. As a result, he would be expected to experience difficulty if he is required to explain complex ideas to others. While he should be able to learn fairly routine verbal material without undue difficulty, it is likely to take him longer to do so than it would take most graduate calibre staff. As a result, he is likely to gain most benefit from training and development programmes that are skills focussed and well structured. He is unlikely to gain great benefit from training programmes that require a high level of verbal ability and which require participants to learn and/or understand complex verbal material.

RESULTS CHART

Scale	Description	Raw	Att.	1 2 3 4 5 6 7 8 9	T Score	%ile
VR1	Verbal Reasoning	8	29	1	27	1

Norm Used:
Verbal Reasoning = 646 Bachelor's Degree Graduates (China)

Scale	Description	Percentage Items Correct	Percentage Items Attempted	Percentage Accuracy
VR1	Verbal Reasoning	27	97	28

NUMERICAL REASONING

SCALE DESCRIPTION

Numerical Reasoning 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 a low level of numerical reasoning ability when compared to the chosen reference group. This suggests that he is likely to experience significantly more difficulty than most graduate calibre staff in perceiving the logical patterns and relationships between numbers, in understanding the rules that govern these patterns and in deducing the logical consequences of these rules.

Sam Sample is unlikely to be particularly good at working with numbers and is likely to have difficulty grasping subtle numerical ideas and concepts. It is likely that it will take him longer than most graduate level staff to learn new numerical skills, with him being likely to have difficulty fully understanding the mathematical/numerical principles that underlie the skills he has acquired. Consequently, if he is to benefit from further training in this area the material will need to be presented in a well structured way, and be skills focussed rather than being aimed at teaching fundamental numerical principles and mathematical concepts.

RESULTS CHART

Scale	Description	Raw	Att.	1 2 3 4 5 6 7 8 9	T Score	%ile
NR1	Numerical Reasoning	4	25	1	20	0

Norm Used:
Numerical Reasoning = 633 Bachelor's Degree Graduates (China)

Scale	Description	Percentage Items Correct	Percentage Items Attempted	Percentage Accuracy
NR1	Numerical Reasoning	16	100	16

ABSTRACT REASONING

SCALE DESCRIPTION

Abstract Reasoning 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 a low level of natural (i.e., untutored) reasoning ability. This suggests that he is likely to experience significantly more difficulty than most staff (in general level employment) in correctly identifying logical patterns and relationships between novel material. He is similarly likely to experience more difficulty than most staff in being able to use pure logic (i.e., without calling upon other information such as his vocabulary, knowledge of mathematical operations, etc.) to deduce the consequences of such patterns.

As a consequence, he would be expected to have significant difficulty understanding abstract concepts which are outside of his routine experience. As a result, he is unlikely to benefit from further training and development programmes unless they are skills focussed. Moreover, he would be expected to have difficulty grasping any abstract concepts or complex logic that underpins the skills he has acquired.

RESULTS CHART

Scale	Description	Raw	Att.	1 2 3 4 5 6 7 8 9	T Score	%ile
AR1	Abstract Reasoning	2	18	1	20	0

Norm Used:
Abstract Reasoning = 4069 Bachelor's Degree Graduates

Scale	Description	Percentage Items Correct	Percentage Items Attempted	Percentage Accuracy
AR1	Abstract Reasoning	8	72	11

RESULTS SUMMARY

GRADUATE REASONING PROFILE

Scale	Description	Raw	Att.	1 2 3 4 5 6 7 8 9	T Score	%ile
VR1	Verbal Reasoning	8	29	1	27	1
NR1	Numerical Reasoning	4	25	1	20	0
AR1	Abstract Reasoning	2	18	1	20	0

Norms Used:
Verbal Reasoning (VR1) = 646 Bachelor's Degree Graduates (China)
Numerical Reasoning (NR1) = 633 Bachelor's Degree Graduates (China)
Abstract Reasoning (AR1) = 4069 Bachelor's Degree Graduates

GENERAL MENTAL ABILITY PROFILE

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.