PSYTECH INTERNATIONAL

Sam Sample
27 Mar 2019

EXPERT

STANDARD REPORT

TECHNICAL TEST BATTERY

ABILITY
TTB2

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 Technical Test Battery (TTB2) measures the core skills that are required for selecting and assessing staff for engineering apprenticeships, craft apprenticeships or technical training. It comprises three separate tests, each designed to assess a different area of technical ability. These areas are the ability to reason with mechanical concepts, the ability to manipulate three dimensional spatial relationships and the ability to quickly and accurately find a path through a complex two dimensional maze.

Research has amply demonstrated that these technical abilities are not accounted for by 'general intelligence' but are specific, measurable, abilities in their own right. What is also true, though, is that general reasoning abilities should also be taken into account when considering technical ability. Verbal, numerical and abstract reasoning skills are highly important in most technical occupations and should therefore be assessed alongside technical abilities. Thus it is recommended that a test of general reasoning ability should be administered along with the Technical Test Battery.

The additional diagnostic (raw) scores, which are provided after the profile chart for each of the Mechanical, Spatial and Visual 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 (Mechanical Reasoning, Spatial Reasoning and Visual Acuity) 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 Mechanical Reasoning Test are:

Results Spreadsheet

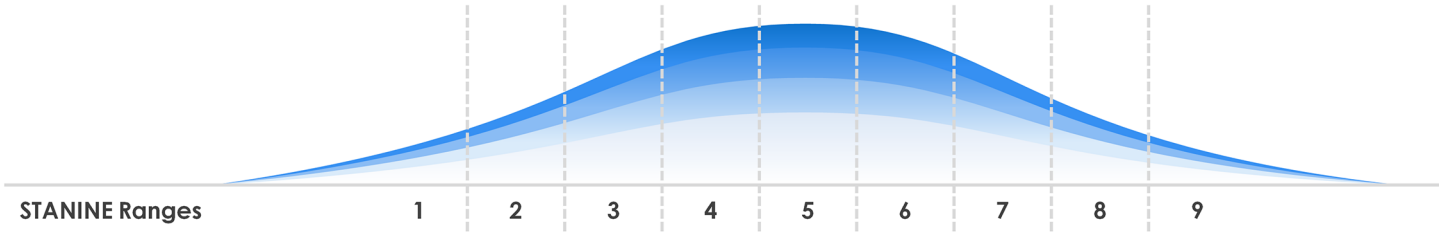
The results spreadsheet provides a summary of the respondents' results across the sub-scales (Mechanical Reasoning, Spatial Reasoning and Visual Acuity) in the form of a spread sheet.

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 (Mechanical Reasoning, Spatial Reasoning and Visual Acuity) 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
Mechanical Reasoning (MRT2)	Apprentice Applicants	1721
Spatial Reasoning (SRT2)	Apprentice Applicants (Aust)	541
Visual Acuity (VAC)	Apprentices	93

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 (SE*m*)	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.

MECHANICAL REASONING

Scale Description

The Mechanical Reasoning Test (MRT2) measures a broad ability to understand mechanical principles. Items have been selected to represent physical principles from a wide range of areas, including optics, electrics, fluids and mechanics. The Mechanical Reasoning Test has been developed to assess craft and technician apprentices who require a practical understanding of mechanical principles in action. The following comments are based on a comparison of Sam Sample's performance on the Mechanical Reasoning Test with members of the reference group.

Result Description

Sam Sample's score on the Mechanical Reasoning Test shows that his performance is within the higher end of the average range when compared to the reference group. This indicates a relatively good level of understanding of mechanical principles. This should enable him to grasp new physical and mechanical concepts and put them to practical application.

RESULTS CHART

Scale	Description	Raw	Att.	1 2 3 4 5 6 7 8 9	T Score	%ile
MRT2	Mechanical Reasoning	22	39	6	53	61

Norm Used:
Mechanical Reasoning = 1721 Apprentice Applicants

Scale	Description	Percentage Items Correct	Percentage Items Attempted	Percentage Accuracy
MRT2	Mechanical Reasoning	49	87	56

SPATIAL REASONING

Scale Description

The Spatial Reasoning Test (SRT2) measures the ability to manipulate, and reason about, shapes and spatial relationships. The SRT2 assesses how well a person can visualise solid objects from looking at their 2-dimensional plans. The Spatial Reasoning Test, therefore, provides an indication of a person's ability to visualise the shape and surfaces of a finished object before it is constructed. Spatial reasoning ability is an important factor in a number of technical occupations, e.g. mechanical engineering, design, architecture etc. The following comments are based on a comparison of Sam Sample's performance on the Spatial Reasoning Test with members of the reference group.

Result Description

Sam Sample's score on the Spatial Reasoning Test is within the top 10% of the reference group, indicating a very high level of spatial reasoning ability. This should enable him to quickly grasp new and relatively complex spatial relationships and to see their practical application.

RESULTS CHART

Scale	Description	Raw	Att.	1 2 3 4 5 6 7 8 9	T Score	%ile
SRT2	Spatial Reasoning	24	25	8	63	90

Norm Used:
Spatial Reasoning = 541 Apprentice Applicants (Aust)

Scale	Description	Percentage Items Correct	Percentage Items Attempted	Percentage Accuracy
SRT2	Spatial Reasoning	80	83	96

VISUAL ACUITY

Scale Description

The Visual Acuity Test (VAC) measures the aptitude for performing tasks which require a great deal of visual precision. The Visual Acuity Test requires the person being tested to trace a path through a number of highly complex mazes in a short period of time. Many of the new technology industries require that workers should be able to work quickly and accurately on tasks which need a high degree of visual precision. Visual acuity is likely to be an important factor in a number of technical occupations, e.g. electrical engineering, mechanical and machine shop apprentices, electrical fault diagnosis, engineering drafting etc. The following comments are based on a comparison of Sam Sample's performance on the Visual Acuity Test with members of the reference group.

Result Description

Sam Sample's score on the Visual Acuity Test is within the top 5% of the reference group, indicating an extremely high level ability for tasks requiring visual precision.

RESULTS CHART

Scale	Description	Raw	Att.	1 2 3 4 5 6 7 8 9	T Score	%ile
VAC	Visual Acuity	15	15	9	79	99

Norm Used:
Visual Acuity = 93 Apprentices

Scale	Description	Percentage Items Correct	Percentage Items Attempted	Percentage Accuracy
VAC	Visual Acuity	100	100	100

RESULTS SUMMARY

TECHNICAL REASONING PROFILE

Scale	Description	Raw	Att.	1 2 3 4 5 6 7 8 9	T Score	%ile
MRT2	Mechanical Reasoning	22	39	6	53	61
SRT2	Spatial Reasoning	24	25	8	63	90
VAC	Visual Acuity	15	15	9	79	99

Norms Used:
Mechanical Reasoning (MRT2) = 1721 Apprentice Applicants
Spatial Reasoning (SRT2) = 541 Apprentice Applicants (Aust)
Visual Acuity (VAC) = 93 Apprentices