



Defining and Assessing Cognitive Ability in Graduate Roles

Client: An international oil and gas company.

Summary

Work Psychology Group (WPG) were commissioned by an international oil and gas company to identify key cognitive characteristics expected of graduates, as well to identify the most appropriate test on the market that best fitted these requirements. A key driver for the client was to streamline and simplify what they do globally and minimise adverse impact to support their diversity agenda.

Objective

Ability tests can help to identify the best graduate talent within organisations and are often used across different disciplines and functions. However, it is important that the tests employed accurately measure the ability required in the work that graduates undertake.

This, combined with a need for the client to streamline and simplify what they did globally and minimise adverse impact to support their diversity agenda, led to WPG being commissioned to examine the cognitive ability requirements expected of graduates and to identify the most appropriate test on the market that best fitted these requirements.

Our Approach

To meet these objectives, a two-phase approach was undertaken. We commenced with a content analysis of job descriptions and technical case studies used as part of the selection process across all disciplines, to identify cognitive ability requirements for the roles.

After drafting and collating the initial findings, telephone interviews followed to explore these cognitive ability requirements in greater detail across different roles and disciplines, where commonalities and differences were explored

Analysis of the interview data provides us with a defined set of cognitive ability requirements which consisted of five broad areas. These requirements were then used to map the different tests on the market, to identify the most appropriate test to use going forward.

Results and Outcome

This analysis provided good validation of the graduate cognitive requirements, and demonstrated that the list of requirements, created and refined through a content analysis and interview process, was a robust set of abilities that could be used to help further define graduate roles and their assessment and selection processes.

Analysis showed that each of the five areas were rated as important for all graduates and evaluation between discipline families identified more commonality than difference, indicating that testing requirements are broadly the same across different discipline families.

The final template of cognitive requirements enabled identification of the most suitable tests to use, both in terms of a supplier and the particular suite of tests to use. Analysis demonstrated that the Verbal Ability and Numerical Ability tests are suitable for all discipline families, although greater emphasis could be placed on the Numerical Ability test for Engineering and Trading roles.

Continuing Work

The mapping between the cognitive requirements and the cognitive ability tests has shown that current cognitive tests on the market can be deemed to assess the majority of the core cognitive requirements and indeed were suitable to be used in this context.

This analysis also gave the client the opportunity to enhance and build upon the latter stages of the selection process, where the requirements that are not explicitly assessed as part of the cognitive ability tests, can be examined, for example in the interview stages.