# USING COGNITIVE ASSESSMENTS IN TALENT RECRUITMENT



# WHAT IS COGNITIVE ABILITY

**Cognitive Ability** refers to the ability to reason, plan and solve problems.

Cognitive Ability refers to the ability to reason, plan and solve problems. General cognitive ability is closely linked to the capacity for knowledge, learning, and information processing. It can determine how much and how quickly a person learns, while also predicting his or her ability to react in innovative ways to new situations.

Cognitive ability assessments have a long history as academic and business tools to predict job performance, and continue to see widespread use to this day.

#### WHY ASSESS COGNITIVE ABILITY

- Cognitive ability has been linked to success in many areas such as academics, job performance and leadership performance.
- Cognitive tests can be administered quickly and easily to large numbers of candidates, making them a highly cost-effective method for recruitment and selection.
- As cognitive assessments have clear right or wrong answers, they cannot be influenced by candidates' attempts to manage their image or give fake responses.

There is a considerable body of research on the relationship between cognitive ability, job performance and leadership, and some key findings and implications are detailed in the following sections.

### COGNITIVE ABILITY & JOB PERFORMANCE

According to research, the link between general cognitive ability and job performance stems mostly from general cognitive ability predicting job knowledge, which then predicts job performance.

People with higher general cognitive ability scores generally acquire a greater amount of job-relevant knowledge and skills at a faster pace compared to others. This leads to higher job performance as they can put these knowledge and skills to use more quickly and effectively. As moving into a new role often requires new learning, being able to learn faster may be more important in determining long-term performance than old knowledge and previously acquired skills.

Furthermore, cognitive ability was found to be a stronger predictor of performance for complex jobs than for simple jobs. This is because the ability to acquire job knowledge and process difficult information quickly and effectively is more critical in complex jobs compared to simple jobs.

In addition, general cognitive ability also significantly predicts performance in job training programs, as it influences the acquisition of job skills as well as job knowledge. Higher general cognitive ability allows workers to acquire new skills more quickly as well as to apply their training more effectively. This in turn enables them to better improve their job performance.

## COGNITIVE ABILITY & LEADERSHIP

Cognitive ability
assessment is an
invaluable tool in helping
to identify and cultivate
leaders and managers

Research suggests that there is a significant relationship between cognitive ability and leadership performance. Much like with job performance, cognitive ability can potentially influence leadership performance through enhancing one's learning ability. Accumulated expertise as well as case-based knowledge have been found to be important resources for effective leadership in any industry.

Cognitive ability is also a key component for many leadership skills which rely on acquiring and applying job-relevant knowledge. Some critical cognitive skills for leaders that have been identified are:

- **Problem Definition:** Effectively considering information from the surroundings to identify and solve problems.
- Cause/Goal Analysis: Understanding the relationship between goals and causes in problem-solving.
- **Constraint Analysis:** Accounting for factors which may constrain solutions to problems.
- **Planning:** Formulating a plan through mental simulation of future
- **Forecasting:** The ability to predict possible outcomes of problems and solutions.
- **Creative Thinking:** Generating novel ideas and contingencies to deal with unforeseen challenges.
- **Idea Evaluation:** Selecting the most potentially successful ideas from those generated.
- **Wisdom:** Applying accumulated wisdom to evaluate solutions and navigate new situations.
- **Sensemaking/Visioning:** Effectively creating and communicating appropriate visions and plans.

Furthermore, cognitive ability has been found to be more critical for leaders at senior positions compared to junior- and mid-level positions. As the organisational level increases, leadership environments become increasingly novel, complex and demanding. This means that cognitive skills such as problem-solving, idea-evaluation and strategic thinking become more important for successful leadership outcomes as one moves up the corporate ladder.

**SUMMARY** 

In conclusion, general cognitive ability is a highly useful predictor of job performance and leadership ability. High cognitive ability indicates a high capacity for the acquisition of knowledge and skills across multiple domains, which in turn translates into better job performance. Cognitive ability tests are therefore useful and cost-effective methods of predicting an individual's potential in the workplace.

#### REFERENCES

Colom, R., Escorial, S., Shih, P. C., & Privado, J. (2007). Fluid intelligence, memory span, and temperament difficulties predict academic performance of young adolescents. Personality and Individual differences, 42(8), 1503-1514.

Hunter, J. E. (1986). Cognitive ability, cognitive aptitudes, job knowledge, and job performance. Journal of vocational behaviour, 29(3), 340-362.

Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. Personnel psychology, 52(3), 621-652.

Kickul, J., & Neuman, G. (2000). Emergent leadership behaviors: The function of personality and cognitive ability in determining teamwork performance and KSAs. Journal of Business and Psychology, 15(1), 27-51.

Krumm, S., Ziegler, M., & Buehner, M. (2008). Reasoning and working memory as predictors of school grades. Learning and Individual Differences, 18(2), 248-257.

Kuncel, N. R., Hezlett, S. A., & Ones, D. S. (2004). Academic performance, career potential, creativity, and job performance: Can one construct predict them all?. Journal of personality and social psychology, 86(1), 148.

Lounsbury, J. W., Sundstrom, E., Loveland, J. M., & Gibson, L. W. (2003). Intelligence, "Big Five" personality traits, and work drive as predictors of course grade. Personality and Individual Differences, 35(6), 1231-1239.

Mumford, T. V., Campion, M. A., & Morgeson, F. P. (2007). The leadership skills strataplex: Leadership skill requirements across organizational levels. The Leadership Quarterly, 18(2), 154-166.

Mumford, M. D., Todd, E. M., Higgs, C., & McIntosh, T. (2017). Cognitive skills and leadership performance: The nine critical skills. The Leadership Quarterly, 28(1), 24-39.

Schmidt, F. L., & Hunter, J. (2004). General mental ability in the world of work: occupational attainment and job performance. Journal of personality and social psychology, 86(1), 162.

Schmitt, N. (2014). Personality and Cognitive Ability as Predictors of Effective Performance at Work. Annual Review of Organisational Psychology and Organisational Behaviour, 1(1), 45-65.

Ones, D. S., Dilchert, S., & Viswesvaran, C. (2012). 10 Cognitive Abilities. The Oxford Handbook of Personnel Assessment and Selection, 179.

Ones, D. S., Dilchert, S., Viswesvaran, C., & Salgado, J. F. (2010). Cognitive abilities. Handbook of employee selection, 255-275.