

A Talegent Whitepaper | June 2014

Meeting the Graduate Recruitment Challenge:

Performance Predictors for Australian &
New Zealand Graduate Candidates

Talegent
Technology meets Psychology

Talegent Australia | talegent.com.au
3 Spring Street, Sydney, NSW 2000 | tel 1800 689 937

Talegent New Zealand | talegent.co.nz
Level 1, 18 Shortland Street, Auckland City 101 | tel 0508 277 377



The Challenge

Thanks to the Internet, the time and effort required to post jobs and apply to jobs has been greatly reduced—but it has resulted in recruiters being inundated with thousands rather than hundreds of applicants. Recruiters typically rely on industry experience as a key screen to quickly narrow the field to those who are likely to be high performers in the role. Unfortunately, that screen does not apply for the purposes of graduate recruitment as most graduates don't yet have meaningful experience within any given industry.

As a result, many recruiters use graduates' job experience and/or grades as a predictor of performance. However, research has found that grades have a relatively weak relationship with work performance,^{2,3} as does previous job experience.¹ In addition to having a lower validity than other screening methods,³ it has been found that the use of academic performance to screen applicants could be discriminatory against some cultural groups⁴.

Numerous other factors also compound the graduate recruitment hiring challenge:

- Varying standards between degrees from different educational institutions
- Graduates are often hired to fill unspecified roles within the organisation
- Time pressure to hire quickly due to competition for the best graduate candidates
- The prodigious volume of applications

For all these reasons, forward-thinking recruiters have been seeking an objective methodology for accurately predicting on-the-job performance that can process large numbers of applicants quickly.

The Challenge

The objective of this study was to uncover candidate characteristics capable of measurement, that could serve as accurate predictors of job performance specifically for organisations operating within the multicultural environments of New Zealand and Australia.

Study Methodology

The Talegent study investigated the cognitive reasoning and personality characteristics that are critical for success in university graduate roles at professional services firms located in New Zealand and Australia.

Talegent researchers conducted a battery of cognitive reasoning tests and personality scales with 100 recent graduates of New Zealand and Australian universities. The results were then compared with manager ratings of their on-the-job performance in a wide range of specific areas including problem solving, ability to complete work tasks, confidence and professionalism, and teamwork, as well as overall work performance.

Findings

Cognitive Ability:

The recent graduates' cognitive ability was found to have the strongest relationship with manager ratings of overall performance (Table 1). Furthermore, the graduates' cognitive ability was found to be significantly related to ratings of leadership effectiveness (Table 1), and the ability to solve problems and complete work tasks (Table 1).

These findings are in line with Schmidt and Hunter's seminal Meta-analysis in which they state that "for hiring employees without previous experience in the job the most valid predictor of future performance is general mental ability."³

In fact, it has been found that, as the information processing requirements of the role increases, so does the importance of cognitive ability.⁵

	Overall Performance	Leadership Effectiveness	Problem-Solving & Work Task Completion
Cognitive Ability	r (98) = 0.3, p < 0.05	r (88) = 0.2, p < 0.05	r (88) = 0.3, p < 0.05

Table 1 : Relationships between cognitive ability scores on assessment & manager ratings of work performance

Personality:

In addition to the graduates' cognitive ability, their scores on several personality constructs were found to be significantly related to manager ratings of performance.

"*Confidence and Optimism*" scores significantly related to manager ratings of overall performance and ability in sales, marketing and communication (Table 2).

Graduates' scores on "*Achievement Striving*" positively related to ratings of the graduate's ability to achieve business outcomes (Table 2).

“Adaptability” scores positively related to manager ratings of leadership effectiveness (Table 2).

These results complement the findings that personality constructs such as work focus, interpersonal orientation, and assertiveness are significant predictors of work outcomes, even when cognitive ability is taken into account⁶.

	Overall Performance	Leadership Effectiveness	Sales, Mktg & Comm Ability	Ability to Achieve Business Outcomes
Confidence & Optimism	r (98) = 0.3, p < 0.05		r (88) = 0.4, p < 0.05	
Achievement Striving				r (88) = 0.2, p < 0.05
Adaptability		r (88) = 0.2, p < 0.05		

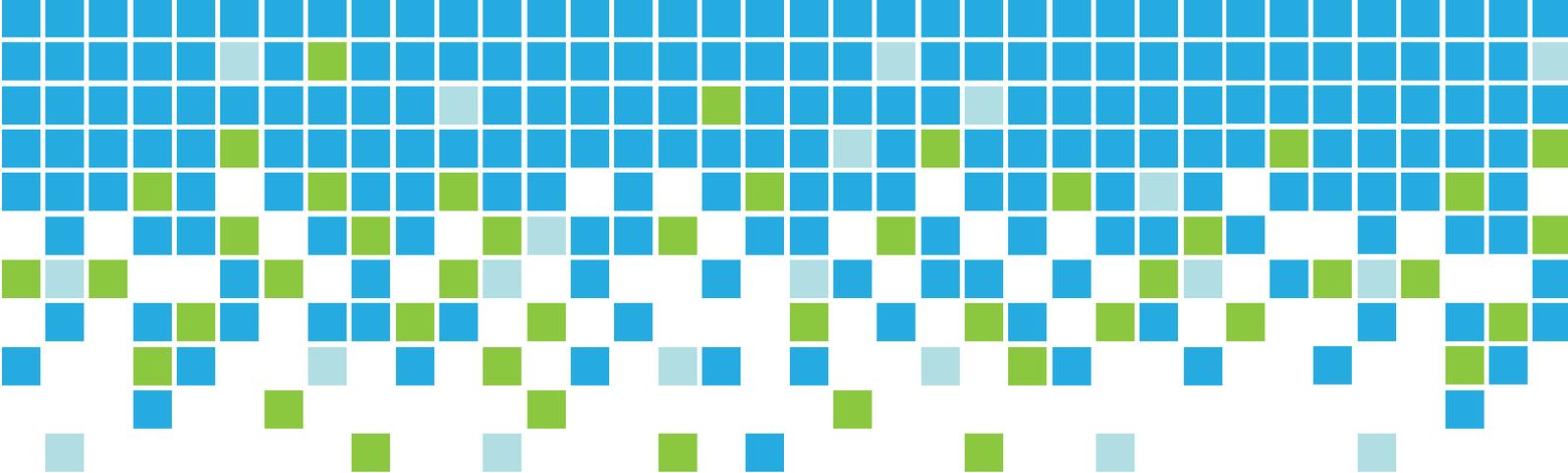
Table 2 : Relationships between assessed personality construct scores & manager ratings of work performance

Conclusion

The need for screening high volumes of graduate candidates with speed in today’s highly competitive, Internet driven recruitment market has spurred the adoption and use of psychometric tools for graduate assessment. Based on the findings of this study, as well as from academic literature and conducted validity studies, cognitive ability is the one measurable characteristic that offers the greatest accuracy in predicting graduates’ on-the-job performance. However, measurable behavioural characteristics also offer a high degree of predictive accuracy as well.

Given the high risk involved with any new hire in general, and graduates’ lack of relevant industry work experience specifically, an assessment approach that integrates both cognitive and behavioural measures offers recruiters a deeper understanding of graduates’ expected capabilities in a work role and the most solid available basis for hiring decisions. The **Australia New Zealand (AUSNZ) Graduate Competency Model** developed by Talegent working with leading graduate recruiters is an example of such an integrated approach. Combining measures of general mental ability with key behavioural tendencies that have been proven critical to success for graduates within New Zealand and Australian organisations, it ensures that recruiters have easy access to applicants’ cognitive bench strength (Verbal, Numerical and Logical) and critical behavioural tendencies (Drive for Results, Social Drive, Teamwork, Business Acumen, Confidence and Optimism, and Influencing and Motivating) to help drive their decision making.

The Australia/New Zealand Graduate Competency Model	
Cognitive	Behavioural
<p>Verbal Reasoning Ability to understand and make decisions based on written information/arguments</p> <p>Numerical Reasoning Ability to make decisions based on numerical information presented in tables, graphs and figures</p> <p>Logocal Reasoning Understands underlying relationships between variables & make logical decisions based on abstract information</p>	<p>Drive for Results Motivated by challenging goals, and strive to achieve them even in the face of obstacles</p> <p>Social Drive Enjoys interacting with others socially, meeting new poeple and building relationships</p> <p>Dependability Views oneself as dependable and reliable, and follows through with agreed upon action</p> <p>Business Acumen Enjoys emperical analysis and focused on long-term strategic outcomes of decisions over short term gains</p> <p>Teamwork Enjoys working cooperatively as part of a team while striving to achieve group objectives</p> <p>Confidence & Optimism Tendency to be self-confident and have a strong belief in one’s abilities and judgments</p> <p>Influencing & Motivating Seeks to understand what drives others and exert influence over their thoughts and actions</p>



References

- Day, D.V. & Silverman, S. B. (1989) Personality and Job Performance: Evidence of Incremental Validity. *Personnel Psychology*, 42, 25-36
- Hunter, J. E., & Hunter, R. F. (1984). Validity and utility of alternate predictors of job performance. *Psychological Bulletin*, 96, 72- 98.
- Schmidt, F.L & Hunter, J.E. (1998) The Validity and Utility of Selection Methods in Personnel Psychology: Practical and Theoretical Implications of 85 Years of Research Findings. *Psychological Bulletin*, 124 (2), 262-274
- Schmidt, F.L & Hunter, J.E. (2004) General Mental Ability in the World of Work: Occupational Attainment and Job Performance, *Journal of Personality and Social Psychology*, 86, 162-173
- Roth, P. L. & Bobko, P. (2000) College Grade Point Average as a Personnel Selection Device: Ethnic Group Differences and Potential Adverse Impact, *Journal of Applied Psychology*, 85, 399-406.

Footnotes:

- 1 Hunter and Hunter (1984)
- 2 Roth, BeVier, Switzer and Schippmann (1996)
- 3 Schmidt and Hunter (1998)
- 4 Roth and Bobko (2000)
- 5 Schmidt and Hunter (2004)
- 6 Day and Silverman (1989)