Research into Graduate Recruitment and Development

Effective graduate recruitment and development practices are key to maintaining the talent pipelines of specialists and senior management positions. Currently hastening the ever imperative need for an abundant pool of qualified high potentials is the aging Australian workforce. The Baby Boomers, a generation known for their unprecedented workforce participation and commitment to organizations for which they work, are retiring in droves. As they leave their long-held jobs in sweeping waves, succession plans are being acted upon at a remarkable pace.

Graduates are typically defined as individuals who have successfully completed a tertiary-level degree at a recognized academic institution. Following or nearing the completion of their program, these individuals typically seek their first post-degree job in their field of study. According to Ben Reeves, the CEO of the Australian Association of Graduate Employers (AAGE), many of the 110,000 domestic student undergraduates apply for graduate programs that usually run from 1 to 3 years (*Human Capital*, 2010). However, a 2004 AAGE Graduate Recruitment Benchmarking study found the average number of applications received for a graduate position was 2,023, with only 1 in 39 graduate applicants getting short-listed.

Considering these statistics and the present labor trends, we see a crucial need for tools and systematic methods that can quickly identify graduates who are most likely to succeed. These metrics should be able to predict fit and success in the graduate position. But, as the talent life cycle stretches far beyond the selection phase, such assessments should also take into consideration the nuanced development, engagement, and retention of inexperienced yet highly talented employees.

The Graduate Study

Peter Berry Consultancy and Hogan Assessment Systems began examining graduate selection, development, engagement, and retention in Australia through ongoing research. Having started in 2010, data are still being collected throughout Australia across multiple industries from both the public and private sectors.

The main objectives of this research, conducted through multiple successive analyses, were to identify at the graduate level:

1. Typical challenges faced at onboarding and early phases of employment

2. Personality characteristics and values associated with organizational commitment

3. The core personality characteristics that best predict success in a graduate position

Initial Analysis: Criterion Study

We focused on identifying the personality characteristics that exemplify high performers and therefore best predict success in a graduate position. The intention was to use the data collected to create a 'Graduate Fit' report; a report that would use criterion validated algorithms of personality inventory scales to predict if a participant would be seen as a high, moderate or low fit in a graduate position. The report would be a tool used to assist graduate level selection processes. To achieve this, a criterion study was conducted correlating the personality scales from the Hogan Personality Inventory (HPI), Hogan Development Survey (HDS), and Motives Values Preferences Inventory (MVPI) to performance and behavioral ratings including ratings of demonstrated work performance, relationship management, and culture fit.

Performance and behavioral data were collected on the graduates working in the following industries: Banking & Financial Services, Engineering, Healthcare & Medical, Legal, and Retail & Consumer Products. Correlation analyses (bivariate) were run on these performance and behavioral ratings and the graduates' HPI, HDS, and MVPI results. A total of 155 graduates (108 from the private sector and 48 Public from the public sector) were included in the HPI analyses and 153 graduates (106 Private and 47 Public) in the HDS and MVPI analyses.

Criterion Study Results

Correlations with HPI scales:

The results suggest that graduates evaluated as high-performers tend to be less self-initiating and goal-oriented (Ambition), as well as less curious and open-minded (Inquisitive).

Table 1*

N	Adjustment	Ambition	Sociability	Interpersonal Sensitivity	Prudence	Inquisitive	Learning Approach
155	-0.02	**-0.14**	-0.04	-0.12	0.04	**-0.17**	-0.09

Correlations with HDS scales:

The results suggest that during times of stress, graduates evaluated as high-performers are less likely to act in an overly assertive, self-promoting (Bold), dramatic (Colorful), or eccentric (Imaginative) way.

Table 2*

N	Excitable	Skeptical	Cautious	Reserved	Leisurely	Bold	Mischievous	Colorful	Imaginative	Diligent	Dutiful
153	-0.01	-0.05	0.11	0.03	-0.03	**-0.14**	-0.08	**-0.21**	**-0.17**	-0.05	0.07

Correlations with MVPI scales:

The results suggest that graduates evaluated as high-performers tend to be less likely to respond to opportunities to participate in financial activities (Commerce), take charge (Power), and increase visibility (Recognition).

Table 3*

N	Aesthetic	Affiliation	Altruism	Commerce	Hedonism	Power	Recognition	Science	Security	Tradition
153	-0.03	0.02	-0.11	**-0.18**	0.09	**-0.17**	**-0.16**	0.00	-0.04	-0.06

*Tables 1, 2 and 3 show the Pearson correlation coefficients for the relationships between the performance and behavioral ratings and the HPI, HDS and MVPI scales. The coefficients that are highlighted in red are statistically significant at $p < .05$; the coefficients highlighted in green are statistically significant at $p<.1$

Unexpected Findings

The results directly contradict previous research around high performing employees. For example, Ambition has often been found to be a characteristic associated with high performance. These findings are hardly surprising given that people who are competitive and driven are likely to work hard to achieve results and are more inclined to seize career advancing opportunities (Hogan Assessment Systems, 2013). However, the graduate criterion study suggests that Ambition is negatively correlated with performance, indicating, counter intuitively, that graduates who score higher on Ambition are likely to receive lower performance ratings.

Follow Up Analysis: SME Job Evaluations

Given these unexpected findings, we sought convergent evidence in identifying the personality characteristics that best predict performance in graduate level positions by using Hogan's validated Job Evaluation Tool (JET). The JET asks those who are currently mastering the role, known as subject matter experts (SMEs), to rate the importance of competency based items in the context of successful job performance. We considered three sections of the JET that are validated against and directly mapped to scales on the HPI, HDS, and MVPI.

Twenty-six SMEs in graduate positions (15 from the private sector and 11 from the public sector), all of whom had been in their role for at least six months and were identified as high performers, were asked to complete the JET. Results were analyzed to ensure inter-rater reliability.

SME Study Results

Performance Improvement Characteristics (PIC; mapped to the HPI)

The PIC analysis suggests SMEs believe in order to perform highly in a graduate position, one should be rule-abiding and conscientious (Prudence), concerned with building and maintaining job-related knowledge (Learning Approach), self-initiating and goal-oriented (Ambition), agreeable in communication (Interpersonal Sensitivity), as well as calm and even-tempered (Adjustment).

Derailment Characteristics Questionnaire (DCQ; mapped to the HDS)

The DCQ analysis suggests SMEs believe in order to perform highly in a graduate position one should not be inclined to become privately resentful (Leisurely), socially detached (Reserved), eccentric (Imaginative), emotionally volatile (Excitable), overly assertive and self-promoting (Bold) or habitually mistrusting of others (Skeptical) during times of stress.

Motivational Improvement Characteristics (MIC; mapped to the MVPI)

The MIC analysis suggests SMEs tend to describe their organizational work groups as opportunities for exerting influence (Power), collaboration (Affiliation), helping others (Altruistic), having clarity and predictability (Security), data and rationales (Science), and using tried and tested methods (Tradition).

Conclusion and Implications

The results from these studies have been somewhat unexpected. Criterion referenced results were inconsistent with previous research on high-performing employees. For example, previous research suggests that employees who score at higher percentiles on scales like Adjustment, Ambition and Interpersonal Sensitivity are more likely to perform better in managerial and executive roles (Hogan Assessment Systems, 2013). Our results from the criterion study however, suggest that the opposite pattern occurs. Therefore, to garner a favorable performance appraisal, graduates should appear more modest and alignment driven, as well as more concerned with short-term practicality. But results from the SME study interestingly contradicted the results from the criterion study, and were somewhat consistent with past research around high performing employees. Taken together, two key conclusions can be drawn:

1. There is a misalignment between what graduates expect to enhance performance and what actually enhances performance.

2. The criterion for high performance or what is expected of high performing graduates changes as the individual moves from a graduate position into a more established role.

An exploration of the expectations of graduates may shed some light on these "moving goal posts". Connor and Shaw (2008) note that graduates are expected to be able to work well and get along with others. Graduates are not considered managers or leaders of the organization. Rather, they are usually considered to be in follower roles, are assumed to lack professional experience, and will take time to build credibility; which can be hindered at first by more assertive, attention-seeking behaviors or uninformed "bigger picture" thinking. However, behaviors such as taking charge and demonstrating openness to strategic thought will be sought after in their future management and leadership roles.

Graduates need to be better informed of these fluid expectations to ensure they are appraised consistently well. In particular, they need to be more modest, play more of a following role, and only show their drive and assertiveness once they have gained some experience. Organizations will also need to take note of this as they select graduates, appraise their immediate performance, and develop them into leadership roles to ensure they retain and not inadvertently lose key talents.

Future Research:

Although our initial intention was to create an algorithmic personality scale based 'Graduate Fit' Report, given our research, it appears this may not be the most suitable solution. Further to this data, it would be interesting to explore if there are significant differences across industries or sectors. Although our data can be analyzed by industry and sector, our sample size is too small to draw confident conclusions from such comparisons. Initial analyses are indicating some nuanced differences, but further industry, sector, or even organizationally specific criterion studies should be conducted to obtain more robust results.

**For more information on this study or the Hogan tools that were used to conduct it,
please contact Peter Berry Consultancy at info@peterberry.com.au.**