

Perceptual Differences in Graduate Recruitment and Selection in Australia

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ABSTRACT

This study examines the perceptual differences between graduate recruiters and graduates in the usefulness and importance of recruitment and selection tools. The findings showed that there were significant differences in the perceptions in the importance and usefulness attached to recruitment attraction tools. Graduates perceived the importance of donations of funds and or equipment to universities, employer directories, press advertisements, internet job boards to be more important. Graduate recruiters perceived that company website to be important. Graduate recruiters perceived that donations to Universities and the creation of subject prizes and advertisement in employer directories to be less useful. Graduates perceived that referrals from friends and or relatives to be more useful. Graduate recruiters tend to put more emphasis on using selection tools which emphasize communication skills.

Keywords: Australia, Graduate Recruitment and Selection, Perceptual differences

Research into recruitment and selection has received continued attention as researchers and employers sought for the most effective methods of selecting the most suitable person for any vacancy. Despite the numerous studies which have focussed on graduate recruitment from countries such as USA, UK and Europe (e.g., Anderson and Shackleton, 1990; Eleftheriou and Ivan, 1999; Garavan and Morley, 1998; Henderson, Anderson and Rick, 1995; Hodgkinson and Payne, 1998; Keenan, 1995; Rynes and Boudreau, 1986), to-date there is insufficient empirical evidence of the methods used by Australian firms in selecting graduates. For example, the recent study by Di Milia and Smith (1997) focused on the methods used in selecting Australian managers, rather than graduates. Given the lack of empirical evidence into the context of graduate recruitment and selection in Australia, the current study has several aims, including (i) to identify the selection methods for graduate recruitment, and (ii) to identify the most important and useful selection methods in predicting the job performance of graduates.

The format of the paper is as follows: first, we will briefly review the literature on the status of graduate recruitment and selection. Second, we will outline the research methodology. Finally, the findings are reported, together with a discussion of the practical implications.

GRADUATE SELECTION

The literature on recruitment and selection has generated a wide body of issues, especially in relation to the best practice in attracting applicants to an organisation (Breaugh and Starke, 2000; Cooper and Robertson, 1995; Smither and Reilly, 1993; Scholarios and Lockyer, 1999), the predictive validity of selection methods (Salgado, 1999; Rynes and Boudreau, 1986; Hough and Oswald, 2000), the preferred methods used by practitioners (Shackleton and Newell, 1989; Judge, Cable and Higgins, 2000; Moscoso, 2000), and the ideal outcomes of recruitment and selection (Rynes and Boudreau, 1986; Breaugh and Starke, 2000; Cooper and Robertson, 1995).

Selection Methods

The literature review showed that recruiters used a variety of selection methods, such as interviews, aptitude tests, graphology and astronomy (Cooper and Robertson, 1995). Selection methods receiving most attention include bio-data, interviews, assessment centres and aptitude tests (e.g., Cooper and Robertson, 1995; Di Milia and Smith, 1997; Rynes and Boudreau, 1986; Salgado 1999; Schmidt, Ones and Hunter, 1992). Terpstra and Rozell (1993) found a positive relationship between a greater use of selection methods and organizational performance.

Yet organisations still continued to rely on unstructured interviews for both experienced hires and graduates (Di Milia and Smith, 1997; Harris, 2000; Hough and Oswald, 2000). Terpstra and Rozell's (1997) survey on the usage of different methods of selection found that the reasons for not using a particular selection practice varied, based on resource constraints, legal concerns, industry, and the knowledge of the HR professionals in the firm. Based on these descriptive results, they argue that selection in organizations is not scientifically performed and call for additional research on selection practices at the organizational level. Furthermore, there is insufficient empirical evidence to inform us of the methods used by Australian firms in selecting graduates. Hence, our first research objective is to identify the methods used by Australian firms in attracting and selecting graduates.

The choice of selection methods by employers creates some consternation within the research, which suggests that employers may choose selection methods on the basis of expediency rather than technical adequacy (Cooper and Robertson, 1995). For instance, unstructured interview method was perceived to be poor indicators of performance for a number of years as this method suffered from primacy, recency and similarity effects, and non-verbal cues influencing interviewer bias (Judge, Cable and Higgins, 2000; Moscoso, 2000; Shackleton and Newell, 1989). Yet numerous studies have reported their ongoing use in practice, for both experienced hires and graduates (Di Milia and Smith, 1997; Harris, 2000; Hough and Oswald, 2000; Judge, Cable and Higgins, 2000; Salgado, 1999). Therefore, our next research objective was to identify the perceptual differences in relation to the importance and usefulness of the selection methods in predicting performance.

METHODS

The graduate employers' guide, *Graduate Opportunities 2002*, was used to identify graduate employers in Australia and New Zealand. A questionnaire was emailed or mailed to the key contacts shown for all organisations listed in Graduate Opportunities. Altogether 219 surveys were distributed. After two follow-up emails and or telephone calls, we received responses from 52 organisations (52 individuals responding or a response rate of 23.7 percent). Two surveys were not used in the final analysis as they did not refer to graduate recruitment conducted in 2001. This sample size is approximately half of a recent industry-wide study by The Australian Association of Graduate Employers (n=117). In addition to the above, we also surveyed 66 recent graduates enrolled in a postgraduate degree in a metropolitan university. We received 58 responses, after excluding incomplete responses.

The survey gathered background information from the participating organisations and the information sources used for graduate recruitment and selection. In addition, we also asked the respondents to indicate the degree of usage and the perceived importance of the methods. The information sources were adapted from the studies by Rynes and Boudreau (1986) and Pychtin's Northeast Quadrant 2001 Graduate Recruitment Survey of Australian Graduates. Participants were asked to rate, on a 7-point Likert scale, the degree of importance of each information source used by

their organisation, and the degree of usefulness of the information source as a method of attracting graduates to their organisation.

We also asked the respondents to consider the importance and usefulness to employers of a variety of methods such as interviews, assessment centres, aptitude tests and bio-data. The selection methods were adapted from those used by Di Milia and Smith (1997) in their survey of Australian management selection practices, and those used by Keenan (1995) in his survey of UK graduate selection techniques.

Respondents were also asked to rate the impact of a number of factors on their choice of graduate selection methods in 2001. The factors were adopted from those suggested by recent studies on graduate recruitment (Hodgkinson and Payne, 1998; Keenan, 1995; Rynes and Boudreau, 1986; Salgado, 1999; Schmidt, Ones and Hunter, 1992). The factors were rated on a 7-point Likert scale, ranging from '1'=No impact to '7'= Impacts to a great extent.

Respondents were then requested to use a 7-point Likert scale to indicate the degree to which each success measure provided an indication of the success in graduate recruitment within their organisation. The success measures were adapted from Rynes and Boudreau's study of graduate recruiters in the USA (1986). Their purpose in asking this question was to gain participants' subjective evaluations of the success of their program. The question in this survey was worded slightly differently, in order to identify which aspects participants used to indicate their success, "All things considered, please indicate, the extent which the following factors were indicative of the success of your graduate recruitment during 2001?"

RESULTS

We relied on descriptive statistics to identify the selection methods adopted. Independent samples T-test analysis was then used to compare the differences in the importance and usefulness of selection methods between graduate recruiters and graduates. Graduate recruiters were categorised into three industry groups: 70% (or 35 respondents) from Services (professional services, consultancy, financial services, etc), 12% (or 6 respondents) from Mining/Manufacturing/Engineering, and 18% (or 9 respondents) from the Public Sector. Most of the respondents were from large organisations (44%, greater than 1000 employees), followed by 36% from small organisations (0-less than 500 employees)

and 20% from medium-sized firms (500 to 1000 employees). The sample characteristics are similar to that of the industry-wide study by The Australian Association of Graduate Employers (Talent Zone Asia Pacific, 2003). Respondents were asked to indicate the number of graduates recruited during 2001 to commence in 2002. Most of these firms were medium recruiter of graduates (21-50 graduates), followed by 32% of small recruiters (less than 20 graduates) and 26% large recruiters (greater than 51 graduates). Within the responding organisations, the responsibility for graduate recruitment was made by HR Director (11 %) and HR Managers. Of the graduates who responded, 16 graduated in 2002, 28 graduated in 2003, 15 graduated in 2004, and 3 graduated in 2005.

As reported in Table 1, there were significant differences in the perceptions between graduate recruiters and graduates in the importance of several recruitment attraction tools. In particular, graduates perceived the importance of donations of funds and or equipment to universities, employer directories, press advertisements, internet job boards. Graduate recruiters perceived that company website to be more important in attracting potential employees than graduates. There were moderate differences in the following tools: friends and or relatives, lecturers/tutors, posters, and subject prizes ($p < .10$ level).

Table 1. Differences in Perceptions between Recruiters and Graduates in the Importance of Recruitment Attraction Tools

| | | Mean | F | Sig |
|-----------------------------|---------------------|------|-------|------|
| Imptce Donations | Graduate recruiters | 2.41 | | |
| | Students | 3.32 | | |
| | Total | 3.07 | 4.665 | .034 |
| Imptce Coy Website | Graduate recruiters | 6.33 | | |
| | Students | 5.69 | | |
| | Total | 5.96 | 5.567 | .020 |
| Imptce Friends/Relatives | Graduate recruiters | 4.89 | | |
| | Students | 5.42 | | |
| | Total | 5.19 | 3.440 | 0.67 |
| Imptce Employer Directories | Graduate recruiters | 4.72 | | |
| | Students | 5.40 | | |
| | Total | 5.12 | 5.326 | .023 |
| Imptce Lect / Tutor | Graduate recruiters | 4.13 | | |
| | Students | 4.71 | | |
| | Total | 4.50 | 3.219 | .076 |
| Imptce Posters | Graduate recruiters | 4.08 | | |
| | Students | 4.63 | | |
| | Total | 4.43 | 2.810 | .097 |

| | | | | |
|-------------------------|---------------------|------|--------|------|
| Imptce Subj Prizes | Graduate recruiters | 3.21 | | |
| | Students | 3.90 | | |
| | Total | 3.67 | 2.853 | 0.95 |
| Imptce Press Ads | Graduate recruiters | 4.38 | | |
| | Students | 5.40 | | |
| | Total | 5.04 | 7.960 | .006 |
| Imptce Internet Job Bds | Graduate recruiters | 4.36 | | |
| | Students | 5.80 | | |
| | Total | 5.25 | 16.068 | .000 |

As shown in Table 2, there were perceptual differences in the usefulness of recruitment attraction tools. Graduate recruiters perceived that donations to Universities and the creation of subject prizes ($p=.077$) to be not useful in attracting potential employees. Similarly, advertisement in employer directories is also considered to be less useful than the perception of graduates. Graduates perceived that referrals from friends and or relatives to be much more useful than graduate recruiters.

Table 2. Differences in Perceptions between Recruiters and Graduates in the Usefulness of Recruitment Attraction Tools

| | | Mean | F | Sig |
|-------------------------|---------------------|------|--------|------|
| Useful Donations | Graduate recruiters | 2.63 | | |
| | Students | 3.74 | | |
| | Total | 3.50 | 4.249 | .043 |
| Useful Frnds/Relns | Graduate recruiters | 4.87 | | |
| | Students | 5.50 | | |
| | Total | 5.22 | 3.976 | .049 |
| Useful Er Directories | Graduate recruiters | 4.54 | | |
| | Students | 5.39 | | |
| | Total | 5.03 | 6.890 | .010 |
| Useful In House Pres | Graduate recruiters | 5.77 | | |
| | Students | 4.81 | | |
| | Total | 4.97 | 4.180 | .045 |
| Useful Subj Prizes | Graduate recruiters | 3.04 | | |
| | Students | 3.81 | | |
| | Total | 3.58 | 3.215 | .077 |
| Useful Press Ads | Graduate recruiters | 4.69 | | |
| | Students | 5.37 | | |
| | Total | 5.15 | 3.301 | .073 |
| Useful Internet Job Bds | Graduate recruiters | 4.33 | | |
| | Students | 5.84 | | |
| | Total | 5.31 | 19.341 | .000 |

Tables 3 and 4 report the perceptual differences in the importance of selection tools. There were less variance in the responses provided by graduate recruiters and graduates. The only variation

is in the perception of the importance of job interviews, personality tests, group discussion and presentation during the interviews. Of these tools, graduate recruiters perceived selection tools which emphasize communication to be much more important than graduates.

Table 3. Differences in Perceptions between Recruiters and Graduates in the Importance of Selection Tools

| | | Mean | F | Sig |
|---------------------|---------------------|------|--------|------|
| Imptce Intrv | Graduate recruiters | 6.38 | | |
| | Students | 5.38 | | |
| | Total | 5.56 | 8.921 | .004 |
| Imptce Pers tst | Graduate recruiters | 4.29 | | |
| | Students | 5.44 | | |
| | Total | 5.33 | 5.278 | .025 |
| Imptce Gp Disc | Graduate recruiters | 6.23 | | |
| | Students | 4.75 | | |
| | Total | 5.00 | 11.981 | .001 |
| Imptce Presentation | Graduate recruiters | 5.63 | | |
| | Students | 4.60 | | |
| | Total | 4.74 | 3.173 | .080 |

With respect to the usefulness of the tools, the findings are similar to the importance of the tools. Graduate recruiters perceived those tools which focus on communication to be much more useful than graduates.

Table 4. Differences in Perceptions between Recruiters and Graduates in the Usefulness of Selection Tools

| | | Mean | F | Sig |
|--------------------|---------------------|------|--------|------|
| Useful Intrv | Graduate recruiters | 6.07 | | |
| | Students | 5.17 | | |
| | Total | 5.35 | 6.463 | .013 |
| Useful Gp Disc | Graduate recruiters | 6.14 | | |
| | Students | 4.56 | | |
| | Total | 4.86 | 13.587 | .000 |
| Useful Presntation | Graduate recruiters | 5.40 | | |
| | Students | 4.49 | | |
| | Total | 4.64 | 3.002 | .089 |

DISCUSSION AND CONCLUSION

This paper reports the findings from a study which examines the adoption of selection methods for graduates in Australia by examining the differences and similarities in the perception between graduate recruiters and recent graduates. Our study reveals that a wide range of selection methods are used to recruit graduate trainees into Australian firms. If Australian firms wish to recruit the best graduates, they should be informed of how these new recruits perceived the usefulness and importance of recruitment and selection tools.

Our findings suggest graduate recruiters should consider attracting potential recruits by donating funds to universities to create scholarships and subject prizes. This is because this particular tool will enhance the reputation of the firm by showing graduates that the organization value scholarly achievements and investment on human capital. While job vacancy advertised on the company's internet homepage is important, it is not the best form of attracting potential graduate employees. Graduates prefer job advertisements in newspapers, magazines, and official publication published by the Graduate Careers Australia. Graduates also perceived that social networks, such as referrals from friends and or relatives, are useful in finding out about job vacancies.

Our findings show that there were less variance in the responses provided by graduate recruiters and graduates when asked to examine the list of selection tools. Graduate recruiters tend to put more emphasis on using selection tools which emphasize communication skills. This has particular implication for those designing degree programs. Personal development skills such as public speaking skills, team work, and critical thinking should be a major part of Business curriculum as this will enhance the marketability of their graduates. This finding is consistent with recent Management Development research in Australia (e.g., Karpin report).

Limitations and Implications

The sample size in this study is relatively small and the response rate was low, and therefore results should be generalised to the graduate recruitment population with caution. This is partly reflective of the time of year at which the study was conducted. The surveys were issued to graduate recruiters during May, which for many organisations is the peak of their graduate recruitment season. A better response rate may have been gained had the survey been issued later in the year. The survey

could also be issued to academics to identify whether the literature findings reported earlier match current Australian academic views on recruitment and selection methods and practices. However, given the small population of graduate recruiters, the current study captured the perceptions of less than a quarter of the population. Furthermore, the findings could only be generalised to small and medium sized enterprises in Australia. Therefore, in relation to our research objectives and the exploratory nature of the current study, the findings do allow a snapshot of the level of practices being used in selecting graduate hires in Australia.

REFERENCES

- Anderson, N., & Shackleton, V. (1990). Decision making in the graduate selection interview: A field study. *Journal of Occupational Psychology*, 63: 63–76.
- Breaugh, J.A. & Starke, M. (2000). Research on employee recruitment: So many studies, so many remaining questions. *Journal of Management*, 23(3): 405–434.
- Brown, B.K. & Campion, M.A. (1994). Biodata phenomenology: Recruiters perceptions and use of biographical information in resume screening. *Journal of Applied Psychology*, 79(6): 897–908.
- Caretta, T.R. & Ree, M.J. (2000). General and specific cognitive and psychomotor abilities in personnel selection: The prediction of training and job performance. *International Journal of Selection and Assessment*, 8(4): 227–236.
- Cooper, D. & Robertson, I.T. (1995). *The psychology of personnel selection*, London: Routledge.
- Di Milia, L. and Smith, P. (1997). Australian management selection practices: Why does the interview remain so popular? *Asia Pacific Journal of Human Resources*, 35(3): 90-103.
- Eleftheriou, A. & Robertson, I. (1999). A survey of management selection practices in Greece.; By: *International Journal of Selection & Assessment*, 7: 203-208.
- Garavan, T.N. & Morley, M. (1998). Graduate assessment centres: An empirical investigation of effectiveness. *Education and Training*, 40(5): 206–219.
- Graduate Opportunities in Australia and New Zealand 2002*. Melbourne: The Good Guides Group.
- Harris, L. (2000). Procedural justice and perceptions of fairness in selection practice. *International Journal of Selection and Assessment*, 8(3): 148–157.

- Harvey-Cook, J.E. & Taffler, R.J. (2000). Biodata in professional entry-level selection: Statistical scoring of common format applications. *Journal of Occupational and Organisational Psychology*, 73: 103–118.
- Henderson, F., Anderson, N. & Rick, S. (1995). Future competency profiling: Validating and redesigning the ICL graduate assessment centre. *Personnel Review*, 24(3): 19–31.
- Hodgkinson, G.P. & Payne, R.L. (1998). Graduate selection in three European countries. *Journal of Occupational and Organisational Psychology*, 71(4): 359–366.
- Hough, L.N. & Oswald, F.L. (2000). Personnel selection: Looking toward the future – remembering the past. *Annual Review of Psychology*, 51: 631–644.
- Johnston, E.K. (2000). The practice of human resource management in New Zealand: Strategic and best practice? *Asia Pacific Journal of Human Resources*, 38(2): 69–83.
- Judge, T.A., Cable, D.M. & Higgins, C.A. (2000). The employment interview: A review of recent research and recommendations for future research. *Human Resource Management Review*, 10(4): 383–406.
- Keenan, T. (1995). Graduate recruitment in Britain: A survey of selection methods used by organisations. *Journal of Organizational Behaviour*, 16: 303–317.
- Moscato, S. (2000). Selection interview: A review of validity evidence, adverse impact and applicant reactions. *International Journal of Selection and Assessment*, 8(4): 237–247.
- Rynes, S.L. & Boudreau, J.W. (1986). College recruiting in large organisations: Practice, evaluation and research implications. *Personnel Psychology*, 39: 729–757.
- Salgado, J.F. (1999). Personnel selection methods. *International Review of Industrial and Organisational Psychology*, 14: 1–54.
- Scholarios, D. & Lockyer, C. (1999). Recruiting and selecting professionals: Context, qualities and methods. *International Journal of Selection and Assessment*, 7(3): 142–156.
- Schmidt, F.L., Ones, D.S. & Hunter, J.E. (1992). Personnel selection. *Annual Review of Psychology*, 43: 627–670.
- Shackleton, V.J. & Newell, S. (1989). Selection procedures in practice. *Assessment and Selection in Organisations*, 2(7): 245–256.

- Smither, J.W. & Reilly, R.R. (1993). Applicant reactions to selection procedures. *Personnel Psychology*, 46(1): 49–79.
- Talent Zone Asia Pacific (2003). *The Australasian Graduate Recruitment benchmarking Study*, Sydney: The Australian Association of Graduate Employers.
- Terpstra, D. & Rozell, R. (1997). Why some potentially effective staffing practices are seldom used, *Public Personnel Management*, 26: 483-495.
- Terpstra, D. & Rozell, E. (1993). The relationship of staffing practices to organizational level measures of performance. *Personnel Psychology*, 46: 27-47.
- Ulrich, D. (1997). *Human resource champions: The next agenda for adding value and delivering results*. Boston, MA.: Harvard Business School.
- Wilk, S.L. & Cappelli, P. (2003). Understanding the determinants of employer use of selection methods. *Personnel Psychology*, 56: 103-124.