



Research Report

Business Graduate Competencies: Employers' Views on Importance and Performance

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This paper reports on a study of New Zealand employers' views of how well business graduates are prepared for the workplace. The employers were asked to rate the importance of a selection of graduate competencies using a seven-point Likert scale, and were asked to rate new graduates' performance for the same graduate competencies. The study also investigated the level of importance that employers place on prior work experience for new business graduates. A 'competency gap' between importance and performance was identified from these findings and the impact these findings have for cooperative education programmes is discussed. (*Asia-Pacific Journal of Cooperative Education*, 2003, 4(2), 16-22).

Keywords: competency; business graduates; employers; importance; performance; New Zealand; soft skills; hard skills

We are now living in a world where "the focus is shifting to the continual production of knowledge as a commodity, positioning workers as human capital, virtually immune to obsolescence" (Butler, 1999, p. 136). In such a world, identifying and developing the important competencies required of graduates is a challenging task for curriculum developers.

It has been stated previously that the prime function of cooperative education programs worldwide is to prepare students for the workplace by developing generic and specific competencies that educators believe will be useful to employers (Rainsbury, Hodges, Burchell & Lay 2002). But what do we really know about employers' views on graduate competencies? What competencies do employers view as important, and how competent are our graduates when they first enter the workplace? The literature in cooperative education has focused largely on the views of academia, with few reports of research into employers' views (e.g., Apostolides & Looye, 1997; Dubick, McNerney & Potts, 1996; Wessels & Pumphrey 1995). It is recognized that employer support for cooperative education programs is crucial (Coll, 1996), although indications of employer loyalty can often (mistakenly) be taken as an indicator of satisfaction (Varty, 1996). As Hurd and Hendy (1997) state "employers need data upon which to base their decisions, so it would be prudent for co-op practitioners to conduct research regularly to ensure that employer needs are in fact

being met by co-op programs" (p. 60).

The present study builds on previous work undertaken of stakeholders' views of business graduate competencies (Burchell, Hodges & Rainsbury, 2001), and science and technology graduate competencies (Coll, Zegwaard & Hodges, 2002a, 2002b). Here we look at employers' views of business graduates' competencies, this time covering a wider cross-section of organizations in Auckland, New Zealand, and involving a larger number of employers. This study adds to previous work by asking employers to consider the importance of a number of graduate competencies, and to rate the performance of graduates who recently entered the workforce. In addition, employers are asked to consider the importance they place on prior work experience, for example, gained through cooperative education programs, for graduates entering the workforce.

Graduate Competencies

So what do we understand by the term 'competency'? Spencer and Spencer view competency as a characteristic of an individual, that is causally related to job performance (1993). Competencies can be accumulated within an individual and represent a capacity to perform at some future point (Boam & Sparrow, 1992; Page, Wilson & Kolb, 1993). Essentially, these definitions relate to enduring characteristics possessed by an individual that, under normal

conditions, should result in an acceptable or superior job performance. This notion is based on the premise that competencies are causally linked to individual performance outcomes (Boyatzis, 1982; Spencer & Spencer, 1993).

In a workplace context, competency is a combination of cognitive skills (technical knowledge, expertise & abilities), and personal or behavioral characteristics (principles, attitudes, values & motives), which are a function of an individual's personality. Successful performance, while dependent on a number of factors, will require the presence of both components. Spencer and Spencer (1993) suggest that, if people with the right personal characteristics are recruited initially, then they should have the capacity to quickly acquire the relevant (technical) knowledge and skills in order to attain their employers' performance objectives.

Competency and Capability

There is some interchange and contrasting views of like terms such as competency and capability in the literature. For example, Stephenson (1997) sees *capability* as the integration of knowledge, skills, personal qualities and the ability to learn to deal effectively with unfamiliar and familiar situations or tasks: a view similar to that which Birkett (1993) terms *competency*. Stephenson (1997) states: "Competence delivers the present based on the past, while capability imagines the future and helps to bring it about ... competence is about dealing with familiar problems in familiar situations" (p. 9-10). Rudman (1995) similarly views capability as a precursor to competency, where an individual has the capability to perform a specific task because he or she possesses the necessary knowledge and skills, but may not become fully competent in the task until he or she gains some experience.

In the present study, the authors use the term competency to include capability and characteristics (such as knowledge, technical skills and personal qualities) that an individual may utilize in performing tasks or actions in unfamiliar as well as familiar situations.

Studies of Competencies Required of Graduates

While most employers recognize the importance of graduates' personal characteristics, there is little agreement on the balance expected between these and their discipline-specific technical knowledge (Harvey, Burrows & Green, 1992). However, a review of recent literature examining generic competencies required of graduates, points to increasing emphasis on personal attributes, rather than technical skills (Liston, 1998; Meade & Andrews, 1995; Sweeney & Twomey, 1997; Stasz, 1997; Weisz, 1999).

Various authors have proposed a number of competencies required or expected of graduates. For example, Maes, Weldy and Icenogle (1997), consider oral communication, problem-solving skills and self-motivation to be the three most important competencies required of graduates. Stasz (1997) likewise sees problem-solving, teamwork, communication skills, and personal qualities, as the most important competencies, but suggests that the workplace context determines their relative importance. Joseph and

Joseph (1997), in a survey of 280 New Zealand graduate employers, found the top ranked competencies in descending order were: willingness to learn; having a positive attitude; being motivated; having good communication skills; and, possessing the ability to work independently.

Hence, the literature suggest that employers of graduates now place major emphasis on generic, behavioral competencies, both in the recruitment of graduates for employment, as well as their performance on the job (Raymond, McNabb & Matthaai, 1993; Weisz, 1999). As a consequence, undergraduate courses must seek to develop these competencies in order to meet the needs of business (Haber, 1993).

Weisz (1999) found evidence of a link between degree programs that included work-based cooperative education and graduate employment, and found that employers expect generic competencies to be developed prior to employment. Interestingly, Weisz (1999) noted little correlation between academic achievement and levels of generic skills, suggesting that employability is not necessarily related to academic ability.

Joseph and Joseph (1997) report that employers believe that educational institutions provide relevant employment experience for their business students, but remarkably, ascribe generic competencies a low level of importance. However, the level of competency expected of graduates by these employers, fell well below their perceived level of importance, suggesting that employers expected these competencies would be developed elsewhere in the curriculum and not necessarily through industry involvement.

Raymond, McNabb and Matthaai (1993), in a survey of teaching methods to develop competencies for the workplace, found both employers and students ranked cooperative education as the most important educational method, and pointed to a critical need for student thinking and ability to learn.

In summary, there have been a number of studies reported in the literature that point to what employers consider to be important in graduates, but there is little recent research on employers' perceptions of the level of competency that graduates bring to the workplace.

Research Questions

A prior study undertaken by the authors, reported the results of a questionnaire survey of employers administered in 1998, and identified the level of importance that large (the 'Top 500') New Zealand organisations placed on business graduate competencies (Burchell, Hodges & Rainsbury, 2001). Given that many graduates entering business roles will not take up employment in large organisations, the present study (carried out in 2002) aims to gain the views of a wider cross-section of employers. The present study extends our understanding of this area by seeking to establish employers' views on the *performance* of graduates in business roles, and the extent to which this differs from the *importance* they attribute to the competencies. In addition, the present work seeks to identify the level of

importance these employers place on previous work experience when employing graduates in business roles.

Method

Design of Survey Instrument

A questionnaire survey was conducted of employers in Auckland, New Zealand. Employers were asked to rate the level of *importance* they attributed to 25 competencies for bachelor-level graduates in business roles in their first year of work. They were also asked to rate the typical level of *performance* that such graduates demonstrated for each competency. The competencies were listed in random order on the instrument and included definitions for each of the 25 competencies listed.

The ratings were based on responses to a seven-point Likert scale. For the *importance* scale, 1 indicated the competency was unimportant, and 7 indicated the competency was very important. Similarly, for the *performance* scale, 1 indicated the performance of the competency was poor, and 7 indicated graduate performance for that competency was excellent.

In the questionnaire, respondents were also asked to indicate the level of importance they placed on bachelor-level graduates, entering business roles, having some business work experience prior to completing their tertiary study. A similar seven point Likert scale was used for this question, ranging from 1 (unimportant) to 7 (important).

As with previous surveys (Burchell, Hodges & Rainsbury, 2001, Coll, Zegwaard & Hodges, 2002a, 2002b), the competency categories were taken primarily from the work of Spencer and Spencer (1993), Harvey, Burrows and Green (1992), Meade and Andrews (1995), and Sweeney and Twomey (1997).¹ However, for the present study three additional competency categories were added: *Problem solving*; *interpersonal communication*; and, *energy and passion*. *Problem solving* was added to distinguish problem resolution from problem analysis (which is covered separately under *analytical thinking*). *Interpersonal communication* was added to distinguish descriptive components: effective speaking; and, listening and utilization of non-verbal communication, from the broader competency category of *relationship building*, which has an emphasis on networking and contact building. The addition of the competency category *energy and passion* was influenced by the use of a similar category that was included in a recent New Zealand-based survey of employers.² Two separate categories previously used - *directiveness* (assertiveness, decisiveness, use of power, taking charge, firmness of standards, group control and discipline) and *team leadership* (being in charge, vision, concern for subordinates, builds a sense of group purpose) – had some clear overlaps and were therefore consolidated into a new single category called *leadership*. Finally, one category

previously used, *information seeking*, was omitted from the questionnaire used in the present survey. The authors believed that the elements of this category (problem definition, diagnostic focus, looking deeper, contextual sensitivity) would be better subsumed under other relevant categories, that is *conceptual thinking*, *analytical thinking*, and *initiative*. The list of competency descriptions used in the questionnaire is shown in the Appendix.

The questionnaire also allowed for open-ended comments from employer, in cases for which their perception of importance and performance for a particular competency differed substantially (e.g., by two or more points).

Administration of the Instrument

There are approximately 45,000 work organizations in the Auckland region.³ For the purposes of the present survey, those organizations that were considered unlikely to employ graduates in business roles (due to the nature of their business or industry, e.g., primary industries such as farming and agricultural production, forestry, and fishing) were excluded from the distribution list. The survey list was further refined by eliminating organizations that employed less than 10 staff, as it was considered unlikely that such organizations would employ business graduates. This process reduced the target population to about 5,000 businesses and the survey was distributed (to a stratified random sample) of approximately 20%, of these organizations (1,142 questionnaires in total). In addition, 161 employers known to the authors' institution (i.e., co-op employers, advisory committee members, and student award sponsors) were also surveyed. Again, employers known to employ fewer than 10 staff were excluded from the survey. In summary, a total of 1,303 questionnaires were distributed to organizations in the Auckland region.

The questionnaire was administered through a mail-out procedure, via a third party independent mail house, with a follow-up letter and a copy of the questionnaire provided approximately one month after the first mail-out. A third mail-out was considered, but deemed too costly and following the law of diminishing returns likely to produce less cost-effective returns (Cohen, Manion & Morrison, 2000).

Response Rate

Of the 1,303 questionnaires distributed, 154 were returned completed and 69 were either returned uncompleted or unusable – generally because the organizations did not employ graduates in business roles. In total, a 17.2% response rate was achieved. A demographic breakdown of the responses is shown in Tables 1 and 2.

It is acknowledged that the response rate is relatively low, although not unusual for a non-targeted (i.e., potential participants that were unknown to the researchers) mail-out survey of this nature (Baruch, 1999).

¹ It should be noted that these prior studies were conducted within different contexts and for different purposes: not surprisingly, different competency categories and meanings were used

² Victoria University of Wellington, Career Development and Employment Student Services Group (2000)

³ Source - Universal Business Directory (UBD) services

Table 1
Questionnaire responses by size of organization (n=154)

Employees	Respondents	
	(n)	(%)
1 – 50	86	56
51-100	27	17
> 100	41	27

Table 2
Questionnaire responses by type of organization (n=154)

Industry Group	Respondents	
	(n)	(%)
Retail	12	7.7
Wholesale	17	11.0
Manufacturing	21	13.5
Travel/Transport/Freight & Storage	9	5.8
Tourism	6	3.9
Telecommunication	16	10.4
Professional/Business Services	25	16.2
Banking/Finance/Insurance	5	3.2
Recruitment/Management Consultancy	9	5.8
Public Services/Utilities/Local Government	8	5.2
Education/Training	14	9.0

As it is not known how many organizations in the Auckland region employ graduates in business roles, it is recognized that the results reported below cannot be interpreted as being representative of the population. However, with 154 useable responses, the findings provide insights into the views of a substantial and diverse number of business organizations in the Auckland region.

Research Findings

Analysis of Results: Rating of Importance of Competencies

The estimated means⁴ for the employers' perceptions of the importance for each competency are shown in Figure 1. It can be seen that the means of competencies ranged between 3.86 and 6.36. In the earlier study reporting on employer views of graduate competencies, Burchell, Hodges and Rainsbury (2001) took a mean of less than four to mean that respondents saw such competencies as being unimportant, and found a relatively narrow range of responses. A similar lack of spread in data also is apparent in the present study, as are high means, indicating that the employers in this work in effect believe that all competencies listed (with the exception of *developing others*, estimated mean 3.86), to be important.

In terms of graduates' employability, the importance rankings of competencies provide some insights into these employers' preferences. The top 10 ranked competencies in order were: *ability and willingness to learn*; *energy and*

passion; *teamwork and cooperation*; *interpersonal communication*; *customer service orientation*; *order, quality and accuracy*; *flexibility*; *problem solving*; *achievement orientation*; and, *initiative*. Of particular note, is that eight of the top 10 competencies are the so-called 'soft skills' (sometimes also referred to as affective or behavioral skills). A further notable and unexpected change from the previous (business) employer study was the competency *concern for order, quality and accuracy*, which increased in ranking from 18 to 6. This perhaps suggests that employers are concerned that in a period of rapid change attention to quality and accuracy, and organisational stability can be compromised (Fry & Srivasta, 1992).

Not surprisingly, the competencies *organizational awareness*; *impact and influence on others*; *leadership*; and *developing others* were considered least important for graduates early in their business careers. As with previous studies of employer views on graduate competencies (Burchell, Hodges & Rainsbury, 2001; Coll, Zegwaard & Hodges, 2002a, 2002b), this study found that *technical expertise* was the competency considered less important by the employers (ranked 21st). Joining *technical expertise* as a less important competency, was *computer literacy*. This was ranked 17, a substantial drop from its position in the top 10 in the 1998 business employer survey. It is likely that the lack of emphasis placed on such hard skills indicates that these are considered 'a given' and/or that any deficiencies can be 'fixed' through further training/education – whereas soft skill deficiencies may be seen as less easily overcome. In addition, this lower emphasis on the technical skills is perhaps indicative of the changing nature of the workplace, where today's professionals must grapple with a myriad of 'supercomplexities' that require the application of a broader range of skills and behaviors (Barnett, 1999).

There were a number of competencies considered relatively less important by the business employers in the present study - compared with the views of business employers in the previous study. These include *achievement orientation* (change in ranking from 4 to 9), *initiative* (change in ranking from 2 to 10), *written communication* (change in ranking from 7 to 13), *computer literacy* (change in ranking from 10 to 17), *interpersonal understanding* (change in ranking from 15 to 19), and *conceptual thinking* (change in ranking from 12 to 20).

Analysis of Results: Rating of Graduate Performance

The estimated means for the employers' rating of graduate performance for each competency are shown in Figure 2. Again there is a lack of spread in these data and the mean scores for performance are generally lower than the mean scores for importance. Nevertheless, the mean scores for performance were mostly above four, suggesting that the employers were generally satisfied with the performance of new graduates in business roles. The only competencies in which new graduates were seen to be performing less than satisfactorily were *organizational awareness*; *leadership*; and, *developing others*. However, as noted earlier, these competencies were those considered to be less important compared with other competencies.

⁴ As these data are at ordinal level, only 'estimated means' can be calculated

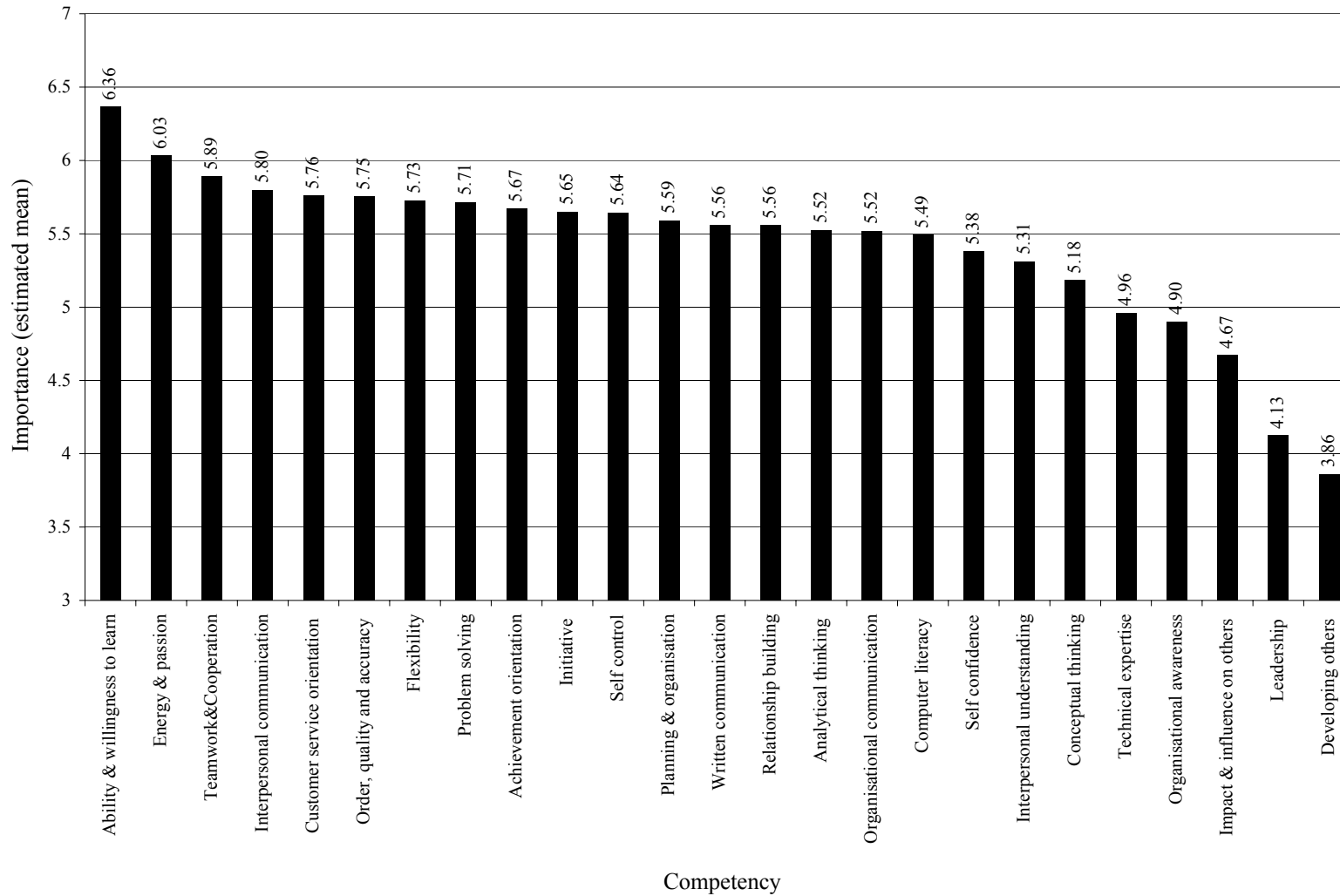


Figure 1
New Zealand business employers' rating of the 'importance' of graduate competencies (estimated means, n=154)

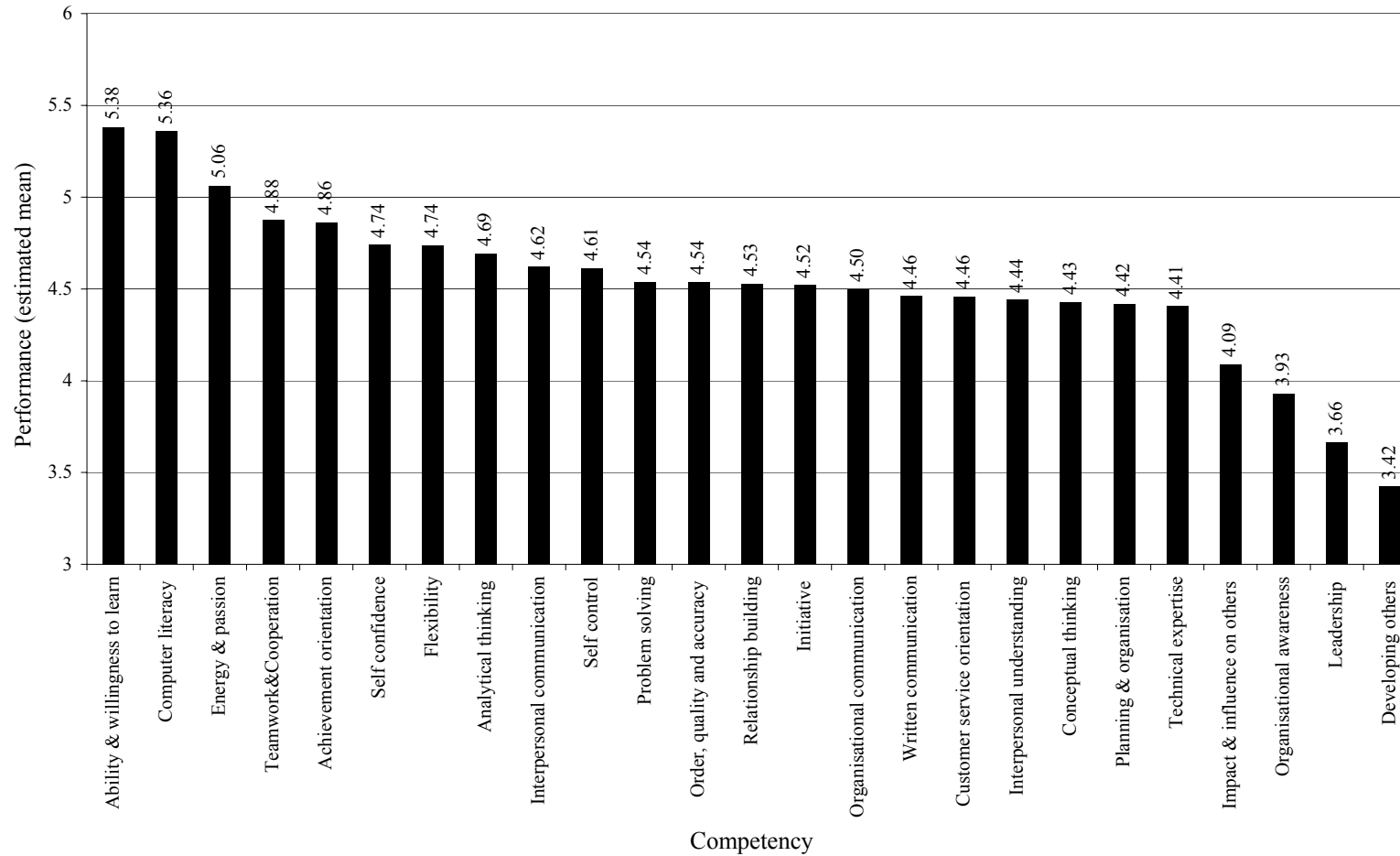


Figure 2
New Zealand business employers' rating of graduate 'performance' for graduate competencies (estimated means, n=154)

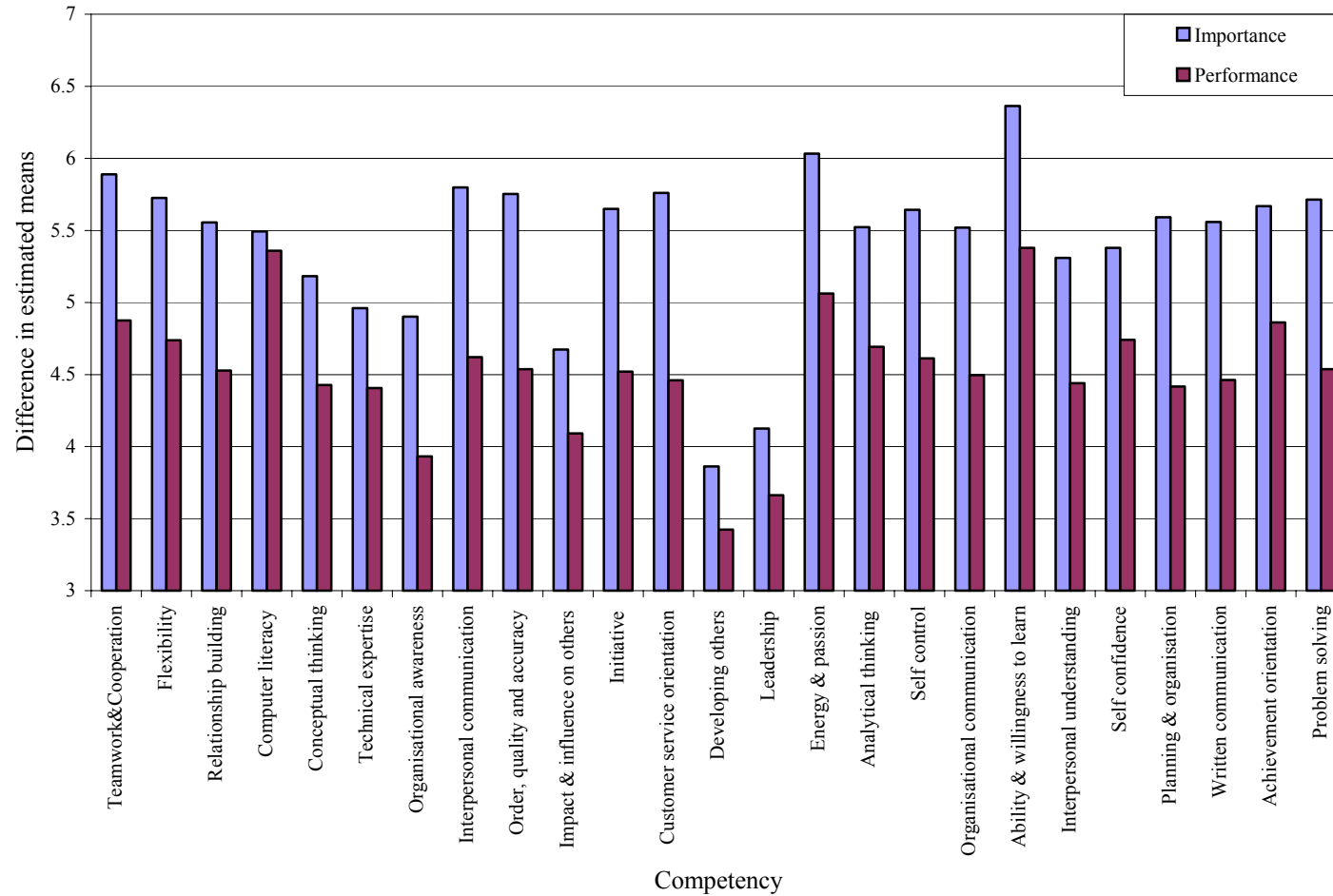


Figure 3
Comparison of New Zealand business employers ranking of ‘importance’ and graduate ‘performance’ for graduate competencies (estimated means, n=154)

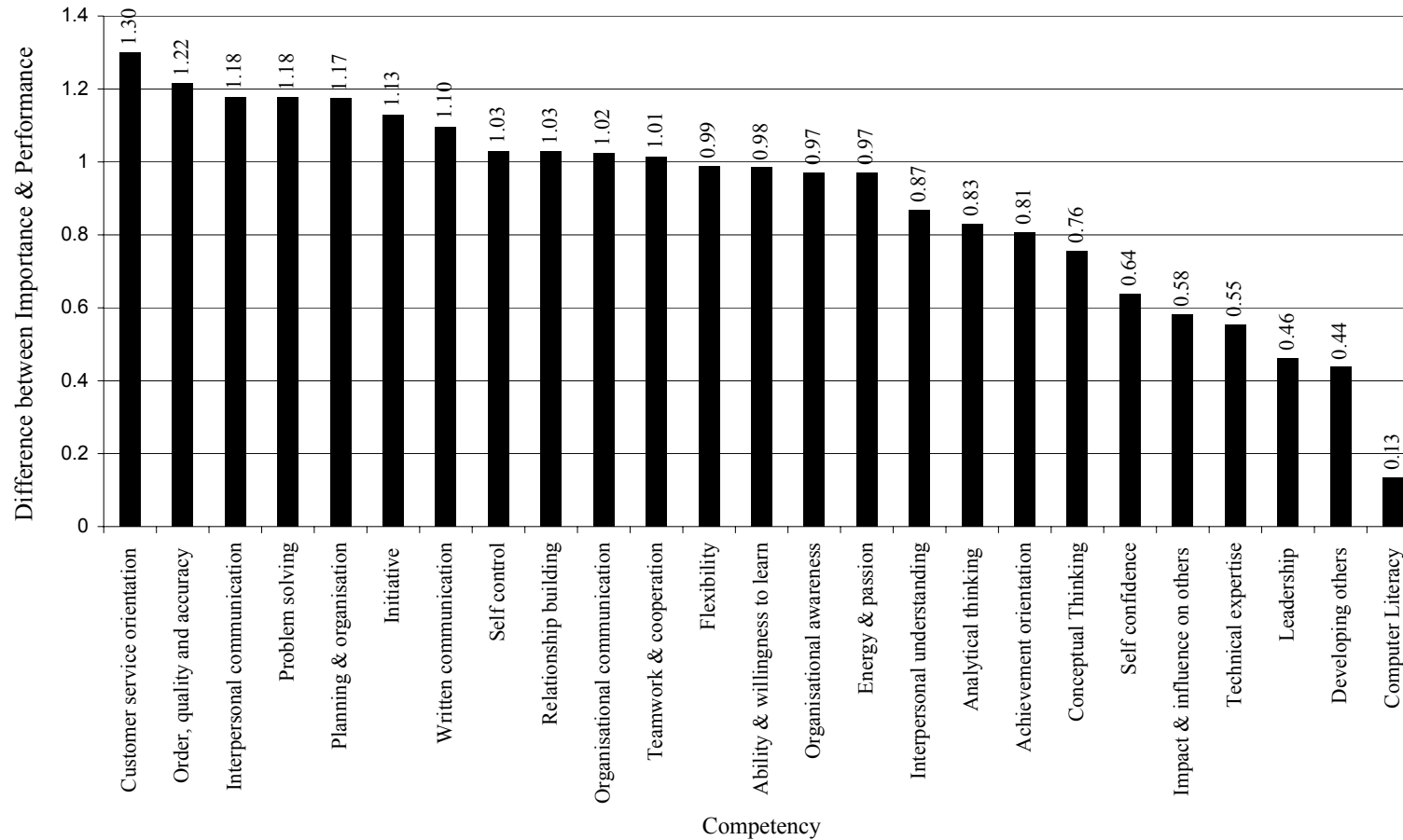


Figure 4 Differences between of New Zealand business employers rating of ‘importance’ and graduate ‘performance’ for graduate competencies (estimated means, n=154)

There are also other similarities between the ranking of competencies by performance and the ranking of competencies by importance. For example, the competencies: *ability and willingness to learn; energy and passion; teamwork and cooperation; achievement orientation; flexibility*; and, *interpersonal communication* feature in the top 10 ranked competencies for performance. It is also interesting to note that *technical expertise* ranked low for both performance and importance, suggesting that these employers believe this can be learned on the job. This does not, however, explain the employers' perception of a performance gap. One explanation could be that there is a mismatch between the type of technical, discipline-based knowledge learned in undergraduate studies and the practical application of this knowledge in the workplace. Some employer comments tend to support this view:

While graduates have advance theoretical skills, [their] practical skills are weak. [They] need to keep more in touch with what's actually needed in the business world.

LLB [i.e., bachelor of Laws] graduates typically have very good academic research skills and knowledge but virtually no practical business knowledge. I feel sometimes a little less research training, and a bit more practical training, would be very useful for law graduates.

A comparison of the importance means and performance means for each competency is shown in Figure 3, and it can be seen that the estimated means for 'importance' all are greater than the means for 'performance' for all competencies. The differences in these means were tested for statistical significance (via a paired sample t-test using conventional statistical methods) and the differences between the importance and performance means were statistically significant for all competencies ($p < 0.05$) with the exception of *computer literacy*. This seems to indicate that employers' expectations of graduates in business roles, as measured by the importance they attribute to a wide range of competencies, are not being met by graduates' performance. Interestingly, it seems that at least some of these employers have resigned themselves to such performance gaps, as one employer noted: "The first two years of our staff employment is a training/learning role, so some disparity of results is to be expected."

The difference in estimated means between importance and performance is shown graphically in Figure 4 (ranked in descending order). Of note, is that the four competencies with the widest differences: *customer service orientation; order quality and accuracy; interpersonal communication*; and, *problem solving* - are all in the top 10 competencies for 'importance'. This suggests that graduate employees may need to have a greater understanding of and a focus on the commercial realities of the modern workplace. Such realities include operating in a global, rapidly changing and highly competitive business environment, that requires both attention to detail and effective communication skills with a need to address client needs (whether this is through quality of service, quality of product, handling of complaints, or in

the resolution of problems).

Both *interpersonal communication* and *written communication* have relatively large differences between importance and performance (difference in estimated means of 1.18 & 1.10 respectively). This deficiency in the desired level of communication skills, particularly written communication skills, was a concern expressed by a number of employers written comments:

Oral and written communication in a professional office is very important when dealing with clients and outside organizations. Often we find that spoken and written English levels much to be desired. This applies not only to immigrants but NZ born grads.

Written communication is often appalling and has to be thoroughly checked before being released to the public.

Written communication has a new focus because of the wide adoption of e-mail.

Written communication skills have deteriorated significantly over the past 10 years.

The main disparity is written communication, and enough has probably been said by others on that.

An interesting finding was that of employers' views on graduates' *self-confidence*. This ranked relatively low in importance (18th), but high on performance (6th). Some comments by employers provide an explanation for this observation:

Relationship building - they think they have it. But some don't have any idea of this important area. Self-confidence - too many are over-confident.

Most graduates are extremely confident and not interested in repetitive tasks. Some have high expectations of their self-worth and usually [that is] not backed up [by the reality].

Employers' Rating of Importance Placed on Prior Work Experience

The employers considered that it was important for graduates entering business roles to have some business work experience prior to completing their tertiary study (estimated mean response of 5.34, see Figure 5). Most respondents (79%) considered work experience to be important with only 9% considering this to be unimportant, with the remaining 12% being neutral. Essentially, these results indicate that most employers want graduates to be more 'work-ready' and they believe that this can be achieved through work experience. For some employers there is a direct link between graduate competency levels and (a lack of) prior work experience. As one employer commented:

In areas where importance exceeds performance, the

reason is lack of experience. Even the best graduate takes 18-24 months to gain sufficient competence. This is a major cost for the company. It takes a long time to be able to recoup the initial cost.

Clearly, cooperative education programs can provide an important role in helping students to gain valuable work experience. A comment by another employer provides a possible explanation of why this prior experience is important:

Generally graduates are poor in the area of organizational maturity. This is just an issue of graduates learning how things should get done. Prior work experience would help. Internships, as part of the curriculum would be of benefit.

Discussion

The results show that, these Auckland employers consider that business graduates need to have high levels of competency in most areas. Graduate's *ability and willingness to learn* was considered to be the most important competency in the workplace for recent graduates in business roles. It is interesting that this was also considered to be the most important competency in two recent similar studies, of science employers (Coll, Zegwaard & Hodges, 2002a, 2002b), and of business employers (Burchell, Hodges & Rainsbury, 2001). This seems to provide further support for Stephenson's (1997) assertion that there is now a perception amongst employers that staying capable in a world of change requires confidence in one's ability to manage one's own learning. In other words, in order to continue to be useful, one must be willing to learn new skills to keep pace with what is now seen as a rapidly changing workplace. Essentially, these findings suggest that employers are looking for knowledge potential, as much as they are looking for knowledge 'currency'. As Sweeny and Twomey (1997, p. 299) note: "Employers are looking beyond content and focusing more on attributes and skills that will enable graduates to be adaptive, adaptable and transformative." Furthermore, in the future employers will expect employees to take responsibility for their own professional development - independent of the employing organization (Casey, 1999).

Successful work performance is seen by many authors to require a mix of both hard (cognitive) skills and soft (behavioral) skills (Ashton, 1994; Birkett, 1993; Caudron, 1999; Georges, 1996; Mullen, 1997; Strebler, 1997): this is borne out in the present work, but in addition, the research findings suggest that employers place greater importance on soft skills. This finding adds support to the view that a graduate's EQ (emotional quotient) may be a more reliable predictor of their employability and perceived superior performance than their IQ (intelligence quotient) (Kemper, 1999; McMurchie, 1998).

The research findings reported here suggest that these employers believe that business graduates have an acceptable level of computer literacy, but there seems to be room for improvement in all other competencies expected of

in the workplace. To some extent one could expect that the level of importance employers place on graduate competencies would be higher than their perceptions of graduate performance. However, given the statistically significant differences in estimated means between 'importance' and 'performance', the results suggest that these employers desire improved levels of competency from recent business graduates. This is particularly the case for those competencies that have a high impact on the 'bottom line' of customer and client service, such as: *customer service orientation; order, quality and accuracy; interpersonal communication; and, problem solving*. As previously noted, these four competencies were in the top 10 for importance and had the highest importance-performance gap.

This begs the question as to why is there a disparity between employers' expectations of graduates, and perceptions of how graduates actually perform in the workplace. Capelli (1995) suggest that employers considered graduates' attitude and commitment to be key issues, and this was borne in comments from the employers that participated in the present study:

Our experience is that graduates expect too much too quickly and become dissatisfied and negative when they are not given rapid advancement. Real world experience and broad vision are lacking in many - they are very self-focused and have not developed wisdom. We can train some skills, but drive, passion, motivation etc., are internal attitude which affect their importance to us.

New graduates often arrive believing they have a good grasp of the working environment, but often lack real-life experience. However, we always employ people with the right attitude and then help them to fully develop their theory skills in practice. This usually takes 6-12 months to bring the [the competency gap] much closer

Some students grapple with the reality of working life and so flexibility and organizational awareness fall short in [the] first few months of employment. [They] fall short on drive to achieve as they balance pretty full personal lives.

Attitude is vital - an openness, willingness to learn and desire to do their best. Often what's lacking is a commitment to the organization that has invested in training them and then [they] leave at the first opportunity to earn a couple more dollars, rather than see their task through, complete [a] cycle, and learn from this.

Conclusions

While it is acknowledged that the relatively low response rate means we need to be cautious with any interpretation of these survey results, the findings do support earlier studies that show employers want 'well-rounded' graduates with a broad range of competencies. This study has also shown that employers place a great emphasis on graduates' soft skills, and their ability to deal empathetically and effectively

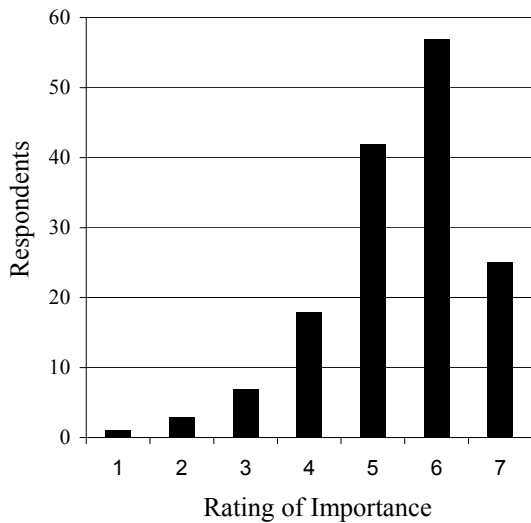


Figure 5

New Zealand business employers' perceptions of the importance of work experience for graduates (n=154)

with customer and client needs.

While these employers are generally satisfied with the performance of new graduates, there is a performance gap in graduate competency levels between what employers find important (and therefore what they would ideally like) and what they experience. Poor communication skills, especially written communication, were identified as an important issue by many employers. Many comments were also made on graduates' attitudes and commitment to the organization, suggesting that the current generation of graduates have a different focus on what is important to them.

Some of the employers questioned the type of technical knowledge graduates gain in their undergraduate studies, and the relevance and application of this to the workplace context. Given that the employers' placed emphasis on the importance of soft skills, this suggests that traditional undergraduate degrees that focus more on cognitive and technical development within a narrow discipline-based theoretical framework, may not be seen as able to produce the well-rounded, multi-skilled, flexible and adaptable graduates demanded by today's business organizations. As Boud and Garrick (1999, p. 2) note:

No longer are the pools of knowledge and expertise acquired in initial education sufficient for the 'new work order'. What is now required are the abilities to put that knowledge and expertise to use in unfamiliar circumstances, and so we find demands for 'flexibility', 'communication skills', 'teamwork' and so on.

The research findings reported here also indicate that employers want 'work-ready' graduates with prior work

experience. These findings also confirm research from an earlier study (Davison, Brown & Davison, 1993), which suggested that employers believe graduates have unrealistic expectations of life in the business world, and are generally deficient in interpersonal skills. These findings then highlight the potential role cooperative education can play in the development of business graduates. While cooperative education programs can provide an ideal vehicle to bridge the gap between the world of work and the world of education, curriculum developers must be vigilant and ensure that they understand the world of work, and thus the competencies demanded of business graduates. As the focus shifts from 'employment' to 'employability', today's graduates will need to understand that their attitude to work is as important as the work itself. Furthermore, their ability and willingness to undertake professional development and training throughout their working life is not only expected, but will be a pre-requisite for lifelong work. As Zuboff (1988, p. 395) argued prophetically: "Learning is no longer a separate activity that occurs either before one enters the workplace or in remote classroom settings ... learning is not something that requires time out from being employed in productive activity; learning is at the heart of productive activity". An important contribution that cooperative education programs can make to students' future work life is to help them to understand that the workplace is simply a different learning institution. It is a place where the curriculum is un-stated and the learning outcomes unclear but, importantly, it is a place where they must take responsibility for identifying their own learning needs and then do something about it, continuously.

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APPENDIX

Competency Descriptions

Teamwork & cooperation (fosters group facilitation and management, conflict resolution, motivation of others, creating a good workplace climate)
Flexibility (adaptability, perceptual objectivity, staying objective, resilience, behavior is contingent on the situation)
Relationship building (networking, establish rapport, use of contacts, concern for stakeholders e.g. clients)
Computer literacy (able to operate a number of packages; has information management awareness)
Conceptual thinking (creative thinking, insight, pattern recognition, critical thinking, problem recognition and definition, can generate hypotheses, linking ideas)
Technical expertise (job related technical knowledge and skills, depth and breadth, acquires expertise, donates expertise)
Organizational awareness (understands organization, knows constraints, power and political astuteness, cultural knowledge, ethical understanding)
Interpersonal communication (effective speaking and listening, utilizes and is responsive to non-verbal communication)
Concern for order, quality & accuracy (monitoring, concern for clarity, reduce uncertainty, keeping track of events and issues)
Impact & influence on others (impression management, strategic influence, presentation skills, showmanship, persuasion, collaborative influence)
Initiative (seizes opportunities, bias for action, proactive, self motivation, persistence, decisiveness, strategic orientation, diagnostic focus, looking deeper, contextual sensitivity)
Customer service orientation (helping and service orientation, focus on client needs, commercial awareness, actively solves client problems)
Developing others (coaching, mentoring, providing support, training, developing others, positive regard)
Leadership (vision, taking charge, concern for subordinates, builds a sense of group purpose, assertiveness, decisiveness, firmness of standards)
Energy & passion (a positive 'can-do' attitude, high energy levels, enthusiasm, pro-active, strong drive)
Analytical thinking (thinking for self, reasoning, practical intelligence, planning skills, problem analyzing, systematic)
Self control (resistance to stress, staying calm, high emotional intelligence (EQ), resists temptation, stamina, not impulsive, can calm others)
Organizational commitment (align self and others to organizational needs, business-mindedness, self sacrifice)
Ability and willingness to learn (desire and aptitude for learning, learning as a basis for action)
Interpersonal understanding (empathy, sensitivity to others, diagnostic understanding, awareness of others' feelings)
Self confidence (strong self concept, internal locus of control, independence, positive ego strength, decisive, accepts responsibility)
Personal planning and organizational skills (ability to organize self and others, effective time management, organizes and completes tasks effectively and efficiently)
Written communication (relevant skills / appropriate use of: emails, internal memos, internal and external reports, letters to clients)
Achievement orientation (task accomplishment – a completer, seeks results, employs innovation, has competitiveness, seeks impact, aims for standards and efficiency)
Problem solving (actively solves identified problems, carries through to completion)