

Human Resource Needs of Organizations in Terms of the Qualities They Need and Seek from New Graduate Employees

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Abstract

Every year, millions of students graduate from universities all around the world and hope to be prepared for the world of work. This study focuses on what qualities organizations need and seek from their prospective employees who have recently graduated with bachelor's degrees. Employers need diverse qualities, such as analytical thinking, interpersonal skills, and willingness to work. Although several studies have covered the issue, they are scattered, and the need remains for a critical review of literature to summarize and integrate these studies. This study presents a through literature review on the subject, including a table that lists sample descriptions, the focus of research and major results of the studies on the topic in order to provide a list of generic qualities that are most valued by employers. The findings of the studies are summarized and discussed. The paper concludes with recommendations for theory and practice.

Keywords: Human resource needs, employer, new graduate, quality

1. Introduction

Many employers see universities as producing the highly skilled employees they need (Webb, 1992). However, whether the new graduates meet the needs of employers remains controversial (Hesketh, 2000). University students and educators need to know what the needs of the employers are in order to meet them.

Although several quantitative and qualitative studies have explored the qualities employers need and seek from new graduates, the studies are scattered. Some focus on the qualities needed from the graduates of a specific education program, such as veterinary school (Heath & Mills, 2000; Schull, Morton, Coleman, & Mills, 2012), while others focus on the qualities required by a specific type of employer, such as retailers (Hart, Harrington, Arnold, & Loan-Clarke, 1999), hotels (Nolan, Conway, Farrell, & Monks, 2010), and academic libraries (Zhu, 2009). Other studies focus on the needs of employers in general and do not differentiate among types of employees (Crossman & Clarke, 2010; Hernández-March, Martín del Peso, & Leguey, 2009; Hesketh, 2000; Morley & Aynsley, 2007). An examination of these three types of studies shows that, although some employers seek education-specific or industry/job-specific qualities, most of the qualities sought are generic qualities (i.e., qualities that apply across many fields). The current paper fills a gap in the research by critically reviewing the literature and integrating the studies that have addressed the issue in order to provide a list of generic qualities that are most valued by employers.

2. Literature Review

Most of the studies on the qualities employers need and seek from prospective employees who have recently graduated with bachelor's degrees focus on the qualities employers require the graduates of particular type of education program to have.

These studies emphasize the qualities graduates in certain fields should have, such as the qualities required of graduates in business (Andrews & Higson, 2008; Daud, Abidin, Sapuan, & Rajadurai, 2011; Tanyel, Mitchell, & McAlum, 1999), economics (Hellier, Keneley, Carr, & Lynch, 2004), accounting (Cook & Finch, 1994; Jackling & De Lange, 2009; Kavanagh & Drennan, 2008), tax (Miller & Woods, 2000), operations research (Sodhi & Son, 2008), vocational (Al-Alawneh, 2011; Velde, 2009), social work (Forte & Mathews, 1994), psychology (Landrum & Harrold, 2003), engineering (Husain, Mokhtar, Ahmad, & Mustapha, 2010), science and technology (Kirk & Chapman, 1992), computer science (Wickramasinghe & Perera, 2010), agriculture (Norwood & Henneberry, 2006), veterinary (Heath & Mills, 2000; Schull et al., 2012), and tertiary environmental studies (Thomas & Nicita, 2003).

Only a few studies focus on the qualities that a particular type of employer requires from graduates. These studies explore the qualities that employers like retailers (Hart et al., 1999), hotels (Nolan et al., 2010), investment banks, law firms, and management consulting firms (Rivera, 2011), and academic libraries (Zhu, 2009) seek and need in their prospective newly graduate employees. Some studies in the latter group focus on the needs of employers in general and do not differentiate among types of employees (Crossman & Clarke, 2010; Hernández-March et al., 2009; Hesketh, 2000; Morley & Aynsley, 2007).

Most of the studies reviewed use questionnaires, although two (Sodhi & Son, 2008; Zhu, 2009) use job ads, and some of the studies use qualitative methods, such as semi-structured questionnaires with open-ended questions (Crossman & Clarke, 2010), interviews (Andrews & Higson, 2008; Crossman & Clarke, 2010; Jackling & De Lange, 2009; Kavanagh & Drennan, 2008; Morley & Aynsley, 2007; Rivera, 2011), focus groups (Kavanagh & Drennan, 2008; Morley & Aynsley, 2007), and participant observation (Rivera, 2011).

Researchers have studied the issue in several countries. Of the twenty-eight studies reviewed, only one was carried out in multiple countries (the UK, Austria, Slovenia, and Romania), while the remaining studies addressed single countries. Seven studies were carried out in the U.S., seven in Australia, five in the UK, two in Malaysia, and one study each in China, Ireland, Jordan, New Zealand, Spain, and Sri Lanka. Table 1 summarizes the studies reviewed and provides information on the samples used, the research focus (i.e., the type of employer or education program studied), and major findings.

Table 1: Summary of the Studies on Qualities Organizations Need and Seek from New Graduate Employees

| Author(s) and Year | Sample | Type of Employer or Education Program Studied | Findings** |
|----------------------------|--|---|--|
| Al-Alawneh (2011)* | 101 employers and business owners who hired graduates from vocational educational institutions in Jordan | Vocational education | The top five skills valued by employers are being respected by others, having an open channel for communication, understanding the organizational structure, enforcing the organizational law and the labor law, and accepting others' opinions and criticism. The top five skills valued by both employers and educators are computer application skills, English language skills, communication skills, teamwork skills, and the ability to work under pressure. |
| Andrews and Higson (2008) | 20 employers in the UK, Austria, Slovenia and Romania | Business education | The results of semi-structured interviews show that employers' perceptions of the skills and competencies graduates need are similar in all four countries: Business-specific skills (e.g., analytical thinking, problem solving, IT skills, business acumen), interpersonal competencies (e.g., written and oral communication skills and team-working skills), and work experience and work-based learning (e.g., previous work placement and part-time employment). |
| Cook and Finch (1994) | 509 accounting employers from public accounting, industry, government, and education in the U.S. | Accounting education | To the question concerning "the most important quality in a potential employee," 35 percent answered that the most important quality was educational background, 33 percent said training potential, 25 percent said prior work experience, and 7 percent said some other quality. |
| Crossman and Clarke (2010) | 15 middle and senior managers in Australia | General | The major finding of this qualitative study is that there is a strong connection between international experience and the employability of graduates. |

| Author(s) and Year | Sample | Type of Employer or Education Program Studied | Findings** |
|--------------------------------|---|--|--|
| Daud et al. (2011) | 479 managers in companies that recruited from a business school in Malaysia | Business education | Managers report that all of the dimensions of knowledge (i.e., explicit and tacit knowledge), skills (i.e., hard technical skills and soft skills like the attitudes and approaches that employees take to work), abilities (i.e., intellectual and physical abilities), and the five factors for personality dimensions (i.e., conscientiousness, agreeableness, emotional stability, openness, and extroversion) are important. |
| Forte and Mathews (1994)* | 77 agency personnel (in social services, health settings and so on) in the U.S. | Social work education | Of fifty-six curriculum items ranked, the top five are: understanding confidentiality, verbal communication skills, written communication skills, commitment to ethics, and involving clients in problem solving. |
| Hart et al. (1999)* | 22 retailers (including food, fashion and mixed retailers) in the UK | Retailing | While employers consider all competencies important, the most crucial ones are personal drive and initiative, planning and organizing, leadership and team-working, achievement orientation, self-awareness, and self-development. |
| Heath and Mills (2000)* | 258 employers in Australia | Veterinary education | Among the qualities given, the ones most valued by employers are the ability to gain the respect and confidence of clients, skill in handling people, the ability to work as part of a team, being prepared to seek help when needed, the ability to communicate ideas, and the ability to analyze a situation or problem logically. |
| Hellier et al. (2004)* | 29 organizations in Australia | Economics education | Among the qualities given, the ones most valued by employers are clear writing skills, data analysis skills, having an inquiring mind, interpersonal skills, and having a practical orientation to work. |
| Hernández-March et al. (2009)* | 872 employers in Spain | General | Among the qualities proposed, the ones most valued by employers are the willingness to work, the ability to learn, the ability to work as part of a team, oral communication skills, and time-management skills. |
| Author(s) and Year | Sample | Type of Employer or Education Program Studied | Findings** |
| Hesketh (2000) | 372 employers in the UK | General | Verbal communication, learning, written communication, problem solving, teamwork, self-management, numeracy, information technology, and technical skills are all important to employers. |
| Husain et al. (2010) | 180 employers in Malaysia | Engineering education | Personal quality, interpersonal skills, resources skills, basic skills, information skills, thinking skills, and system and technology skills are all important to employers. |
| Jackling and De Lange (2009)* | 12 HR managers in organizations in Melbourne, Australia | Accounting education | The results of semi-structured interviews show that employers consider the most important skills to be team skills, leadership/leadership potential, verbal communication skills, interpersonal skills (e.g., being motivated, responsible/enthusiastic), key accounting skills, and accounting problem analysis skills. |
| Kavanagh and Drennan (2008)* | 28 employers in Australia | Accounting education | Among the qualities given, the ones most valued by employers are continuous learning, decision making, oral communication, self-motivation, and a professional attitude. |
| Kirk and Chapman (1992) | 103 employers in New Zealand | Science and technology education | Employers state that science and technology graduates could be made more valuable through improved communication skills, exposure to management skills (i.e., skills in planning, decision-making, problem-solving, and marketing), the ability to apply theory practically, improved skills in basic science, practical work experience, improved attitudes (in understanding reality vs. theory, standards of conduct, and work expectations), and lateral thinking. |
| Landrum and Harrold (2003)* | 87 employers from Idaho, Illinois, and Ohio in the U.S. | Psychology education | Among the qualities given, those most important to employers are listening skills, the ability to work with others as part of a work team, getting along with others, the desire and ability to learn, and the willingness to learn new and important skills. |
| Miller and Woods (2000)* | 64 employees in the UK | Tax education | Among the qualities given, those most preferred by employers are the ability to prepare computations, apply current statute and case law, appreciate the general scheme of UK tax, and identify basic personal and business tax planning points, and interpersonal and writing skills. |

| Author(s) and Year | Sample | Type of Employer or Education Program Studied | Findings** |
|-----------------------------------|---|--|--|
| Morley and Aynsley (2007)* | 3 focus groups, 41 interviews, and 100 responses to a web-based questionnaire in the UK | General | Among the qualities given, those ones employers give the highest priority are interpersonal/team skills; core skills like communication, dispositions, previous work experience, and degree classification. |
| Nolan et al. (2010)* | 41 employers in Ireland | Hotels | Among the competencies given, those given the highest rank by employers are excellent client and customer service skills and the ability to work as part of a team, maintain professional and ethical standards, control costs in line with budgets and forecasts, and work in a pressurized environment. |
| Norwood and Henneberry (2006)* | 339 employers in the U.S. | Agriculture education | The top five qualities for which employers would be willing to pay more salary are a high degree of character, a high degree of passion and dedication, excellent communication skills, internship experience related to the job, and a major relevant to the job. |
| Rivera (2011) | 120 interviews in top-tier firms, and participant observation in an elite professional service firm for nine months in the U.S. | Investment banks, law firms, and management consulting firms | The most common criteria in soliciting and screening resumes are the prestige (and not the content) of educational credentials (especially having graduated from Harvard, Princeton, Yale, Stanford, Wharton business, or Columbia law), extracurricular accomplishments (especially time-consuming and high-status activities like field hockey, tennis, and squash), and to a lesser extent, grades. |
| Schull et al. (2012)* | 30 employers in Australia | Veterinary science education | Among the qualities given, those most important ones to employers are honesty, the ability to gain the respect and confidence of clients, knowing limits and being willing to ask for help, the ability to gain the respect and confidence of support staff, treating all members of the veterinary healthcare team with respect, and the ability to work as part of a team. |
| Sodhi and Son (2008)* | Over 1,000 ads for operations research jobs in the UK | Operations research education | The skills most frequently required in the ads are communication, operations management, modeling, statistics, and programming skills. |
| Author(s) and Year | Sample | Type of Employer or Education Program Studied | Findings** |
| Tanyel et al. (1999)* | 151 employers in the U.S. | Business education | Among the qualities given, those employers rank highest are responsibility and accountability, ethical values, interpersonal skills, oral communication skills, time-management skills, and punctuality. |
| Thomas and Nicita (2003)* | 25 employers in Australia | Tertiary environmental education | Among the skills given, those most important to employers are the ability to work in a team, the ability to work independently, writing skills, the ability to take initiative, and oral communication skills. |
| Velde (2009)* | 27 employers in China | Vocational education | Among the characteristics given, those most important ones to employers are positive attitudes and behaviors (being responsible, adaptable and working safely), commitment to learning and growing continuously, the ability to think creatively and solve problems, the ability to work cooperatively with others, and the ability to communicate effectively in oral and written language, especially English. |
| Wickramasinghe and Perera (2010)* | 26 employers in Sri Lanka | Computer science education | Among the qualities given, those most important to employers are problem-solving skills, a positive attitude toward work, the ability to work as a team member, learning skills, and self-confidence. |
| Zhu (2009)* | 47 job ads posted in <i>American Libraries</i> , <i>College & Research Libraries News</i> , and <i>AutoCat</i> in 2006–2008 in the U.S. | Technical services in academic libraries | The most frequently mentioned skills/competencies required by employers are oral and written communication skills; the ability to be innovative/creative; interpersonal/human relations skills; the ability to work collaboratively with faculty, staff, students, and administrators; and leadership skills. |

* Only the top qualities mentioned in these studies have been shared in the present study since the full lists were long.

**The results are presented in the order of importance attached by employers.

Only the top qualities mentioned in each of the studies are shared in the present study since the full list of required/sought after qualities is long. The results of the studies show that, although some employers seek education-specific or industry/job-specific qualities, most qualities sought are generic qualities. The next section focuses on the types of qualities sought by employers.

2.1. Education-Specific or Industry/Job-Specific Qualities Sought by Employers

The results of some of the studies show that some employers seek education-specific or industry/job-specific qualities. A few studies show that employers value the educational background of new graduate employees (Cook & Finch, 1994), degree classification (Morley & Aynsley, 2007), and majors that are relevant to the job (Norwood & Henneberry, 2006). Forte and Mathews (1994) ask employers to rank fifty-six curriculum items for social work graduates in the order of importance and find that one of the items in the top ranks was the ability to involve clients in problem solving, which is considered an ability specific to social work. Jackling and De Lange (2009) carry out semi-structured interviews and find that key accounting skills and accounting problem analysis skills are among the most important criteria for employers who hire accounting graduates. An education-specific quality for science and technology graduates is skills in basic science (Kirk & Chapman, 1992), while for tax graduates, the qualities most preferred by employers are the ability to prepare computations, apply current statute and case law, appreciate the general scheme of the nation's tax, and the ability to identify basic personal and business tax planning points (Miller & Woods, 2000). Two of the competencies ranked highest by hotel employers are excellent client and customer service skills and controlling costs in line with budgets and forecasts (Nolan et al., 2010), which are not generic competencies. The ability to work collaboratively with faculty, staff, students, and administrators, a job-specific quality, is one of the most frequently mentioned skills/competences required by academic libraries for technical services positions (Zhu, 2009). Treating all members of veterinary healthcare team with respect is one of the qualities desired of graduates of veterinary science (Schull et al., 2012), whereas employers require graduates in operations to have research skills in operations management, modeling, statistics, and programming (Sodhi & Son, 2008). However, in all of these studies, at least one generic quality is in the employers' top list of qualities sought from graduates.

2.2. Generic Qualities Sought by Employers

Except for the education-specific or industry/job-specific qualities mentioned in the previous section, all the qualities sought were generic in nature, rather than being confined to a specific education program, industry or job. These generic qualities are those that can be developed in any number of education programs and utilized in a variety of industries/jobs. The generic qualities that organizations need and seek from their prospective new graduate employees, as identified by previous studies, include communication, interpersonal, and teamwork skills; cognitive skills, motivation; willingness and enthusiasm; data/information- and technology-related skills; time management skills and the ability to work under pressure; being ethical; leadership skills; personality/character; and previous work/internship experience.

2.2.1. Communication, Interpersonal, and Teamwork Skills

The competencies employers seek most often are related to communication, interpersonal, and teamwork skills:

- having an open channel for communication (Al-Alawneh, 2011), the ability to communicate ideas (Heath & Mills, 2000), and communication skills in general (Al-Alawneh, 2011; Kirk & Chapman, 1992; Morley & Aynsley, 2007; Norwood & Henneberry, 2006; Sodhi & Son, 2008)
- verbal communication skills (Forte & Mathews, 1994; Hesketh, 2000; Jackling & De Lange, 2009), oral communication skills (Andrews & Higson, 2008; Hernández-March et al., 2009; Kavanagh & Drennan, 2008; Tanyel et al., 1999; Thomas & Nicita, 2003; Velde, 2009; Zhu, 2009), listening skills (Landrum & Harrold 2003), and written communication skills (Andrews & Higson, 2008; Forte & Mathews, 1994; Hellier et al., 2004; Hesketh, 2000; Miller & Woods, 2000; Thomas & Nicita, 2003; Velde, 2009; Zhu, 2009)
- the ability to communicate effectively, especially in English (Velde, 2009), English language skills (Al-Alawneh, 2011)
- interpersonal skills (Hellier et al., 2004; Husain et al., 2010; Miller & Woods, 2000; Tanyel et al., 1999; Zhu, 2009)

- interpersonal/team skills (Morley & Aynsley, 2007)
- teamwork skills (Al-Alawneh, 2011; Andrews & Higson, 2008; Hart et al., 1999; Hesketh, 2000; Jackling & De Lange, 2009), the ability to work as part of a team (Heath & Mills, 2000; Hernández-March et al., 2009; Landrum & Harrold, 2003; Nolan et al., 2010; Schull et al., 2012; Thomas & Nicita, 2003; Wickramasinghe & Perera, 2010), the ability to work cooperatively with others (Velde, 2009)
- the ability to get along with others (Landrum & Harrold, 2003)
- skill in handling people (Heath & Mills, 2000)
- adaptability (Velde, 2009)

2.2.2. Cognitive Skills

The second most common competencies employers seek from new graduate employees are related to cognitive skills:

- thinking skills (Husain et al., 2010), analytical thinking (Andrews & Higson, 2008), and the ability to analyze a situation or problem logically (Heath & Mills, 2000)
- problem-solving skills (Andrews & Higson, 2008; Hesketh, 2000; Kirk & Chapman, 1992; Wickramasinghe & Perera, 2010)
- the ability to learn (Hernández-March et al., 2009; Landrum & Harrold, 2003), learning skills (Hesketh, 2000; Wickramasinghe & Perera, 2010), and continuous learning (Kavanagh & Drennan, 2008)
- understanding the organizational structure (Al-Alawneh, 2011)
- intellectual abilities (Daud et al., 2011)
- having an inquiring mind (Hellier et al., 2004)
- the ability to be innovative/creative (Zhu, 2009), think laterally (Kirk & Chapman, 1992), and think creatively and solve problems (Velde, 2009)

2.2.3. Motivation, Willingness and Enthusiasm

Another important quality employers want new graduate employees to have is motivation for work and learning:

- willingness to work (Hernández-March et al., 2009) and a high degree of passion and dedication (Norwood & Henneberry, 2006)
- self-motivation (Kavanagh & Drennan, 2008), being motivated, responsible/enthusiastic (Jackling & De Lange, 2009), personal drive and initiative, and achievement orientation (Hart et al., 1999)
- positive attitude toward work (Wickramasinghe & Perera, 2010)
- soft skills, such as the attitudes and approaches that employees take to work (Daud et al., 2011)
- willingness to learn new and important skills (Landrum & Harrold, 2003) and commitment to learning and growing continuously (Velde, 2009)

2.2.4. Data/Information- and Technology-Related Skills

Employers want new graduate employees to have data/information- and technology-related skills:

- information skills (Husain et al., 2010)
- data analysis skills (Hellier et al., 2004)
- information technology skills (Andrews & Higson, 2008; Hesketh, 2000), system and technology skills (Husain et al., 2010), and computer application skills (Al-Alawneh, 2011)

2.2.5. Time Management and Ability to Work Under Pressure

Time management and the ability to work under pressure are also qualities sought by employers:

- time management (Hernández-March et al., 2009), and time management and punctuality (Tanyel et al., 1999)
- the ability to work under pressure (Al-Alawneh, 2011) and to work in a high-pressure environment (Nolan et al., 2010)

2.2.6. Being Ethical

Employers value ethics-related qualities as well:

- having ethical values (Tanyel et al., 1999), commitment to ethics (Forte & Mathews, 1994), and maintaining professional and ethical standards (Nolan et al., 2010)
- understanding confidentiality (Forte & Mathews, 1994)
- good attitude toward standards of conduct (Kirk & Chapman, 1992)

2.2.7. Leadership Skills

Only a few studies find that employers seek leadership skills in new graduate employees:

- leadership/leadership potential (Jackling & De Lange, 2009)
- leadership skills (Zhu, 2009)

2.2.8. Personality/Character

Employers value the personality/character of new graduate employees:

- honesty (Schull et al., 2012)
- self-confidence (Wickramasinghe & Perera, 2010)
- conscientiousness, agreeableness, emotional stability, openness, and extroversion (Daud et al., 2011)
- a high degree of character (Norwood & Henneberry, 2006) and personal quality (Husain et al., 2010)
- the ability to accept others' opinions and criticism (Al-Alawneh, 2011)
- dispositions (Morley & Aynsley, 2007)

2.2.9. Previous Work/Internship Experience

Work experience is important to employers when they evaluate new graduate employees:

- previous work experience (Cook & Finch, 1994; Morley & Aynsley, 2007) and practical work experience (Kirk & Chapman, 1992)
- having internship experience related to the job (Norwood & Henneberry, 2006)
- work experience and work-based learning, such as previous work placement and part-time employment (Andrews & Higson, 2008)

2.2.10. Other Generic Qualities

Other qualities of new graduates that employers require less often include:

- skills in decision making (Kavanagh & Drennan, 2008; Kirk & Chapman, 1992), planning (Kirk & Chapman, 1992), and planning and organizing (Hart et al., 1999)
- technical skills (Daud et al., 2011; Hesketh, 2000)
- being respected by others (Al-Alawneh, 2011), the ability to gain the respect and confidence of clients (Heath & Mills, 2000; Schull et al., 2012) and support staff (Schull et al., 2012)
- knowing limits, being willing to ask for help (Schull et al., 2012) and being prepared to seek help when needed (Heath & Mills, 2000)
- being responsible (Velde, 2009) and accepting responsibility and accountability (Tanyel et al., 1999)
- self-awareness (Hart et al., 1999), self-development (Hart et al., 1999), and self-management (Hesketh, 2000)
- a good attitude in terms of understanding reality vs. theory (Kirk & Chapman, 1992), the ability to apply theory practically (Kirk & Chapman, 1992), and having a practical orientation to work (Hellier et al., 2004)
- the ability to work independently (Thomas & Nicita, 2003) and to take initiative (Thomas & Nicita, 2003)
- other qualities: Numeracy (Hesketh, 2000), explicit and tacit knowledge (Daud et al., 2011), physical abilities (Daud et al., 2011), marketing skills (Kirk & Chapman, 1992), international experience (Crossman & Clarke, 2010), a professional attitude (Kavanagh & Drennan, 2008), business acumen (Andrews & Higson, 2008), training potential (Cook & Finch, 1994), the ability to work safely (Velde, 2009), improved attitudes in work expectations (Kirk & Chapman, 1992), and enforcing the organizational law and the labor law (Al-Alawneh, 2011)
- resources skills and basic skills (Husain et al., 2010), although what specifically is meant by “resources skills” and “basic skills” is not explained in the study.

2.3. Specific Qualities Sought by Employers as Reflectors of Generic Qualities

In some cases, employers seek specific qualities because they believe that these qualities reflect some generic qualities they seek. Based on 120 interviews in top-tier investment banks, law firms, and management consulting firms, and participant observation in an elite professional service firm for nine months in the U.S., Rivera (2011) finds that the prestige (and not the content) of an applicant's educational credentials (especially having graduated from Harvard, Princeton, Yale, Stanford, Wharton business, or Columbia law) and extracurricular accomplishments are the most common criteria used in soliciting and screening resumes. The results show that employers in top-tier investment banks, law firms, and management consulting firms consider having graduated from a prestigious university a reflection of a candidate's intelligence, ability to learn quickly, ability to perform the analytical capacities of the job, and social skills and self-presentation abilities because they believe that top universities have rigorous admission processes that select students who are smarter and more able than others.

Employers also use accomplishments in extracurricular activities (especially time-consuming and/or high-status activities, such as field hockey, tennis, and squash) as a criterion in soliciting and screening resumes because involvement in such activities certifies that a candidate has social skills, is interesting and enjoyable, has time-management skills, and has a low risk of burnout. Moreover, unlike completing schoolwork, being involved in activities that are not required is an indicator of initiative, drive, and ambition (Rivera, 2011).

The third most commonly used criterion employers use in soliciting and screening resumes is grades. However, although many firms have a minimum GPA requirement, most evaluators interviewed do not perceive grades as an indicator of intelligence. Moreover, once the resumes are screened and applicants to be interviewed are selected, the qualifications on the resume do not matter any longer, and the final decision to hire is based primarily on the interview performance (Rivera, 2011).

Rivera's (2011) study, then, shows that employers use qualities like having graduated from a prestigious university and accomplishment in extracurricular activities as reflectors of some generic qualities they seek, including intelligence, the ability to learn quickly, the ability to perform the analytical capacities of the job, social skills, self-presentation, being interesting and enjoyable, and having time-management skills, initiative, drive, ambition, and a low risk of burnout.

3. Conclusion

Results of a review of the literature on the qualities organizations need and seek from new graduate employees shows that most of the studies focus on what is needed from graduates of specific education programs, although a few studies focus on the needs of different types of employers or the needs of employers in general, without making reference to a specific type of employer. Another finding is that employers seek education- or industry/job-specific qualities in some cases. However, even in these cases, at least one generic quality is in employers' top list of qualities that they seek from graduates. In general, employers need generic skills, such as communication skills, that can be applied across a range of jobs.

New knowledge and new needs lead to curriculum changes in institutions of higher education, and constant development of new knowledge requires continuous curriculum renewal (Michael, 1998). Since many employers perceive universities as the source of the highly skilled employees they need (Webb, 1992), universities may focus more on the needs of employers and make innovative changes in their curricula to satisfy those needs for the benefit of both employers and graduates. Curriculum renewal requires discarding irrelevant parts of the curriculum so there is room for newer and more relevant content (Michael, 1998). Universities are recommended to change their curricula to improve students' employment-related skills, such as communication, interpersonal, and teamwork skills; cognitive skills; data/information- and technology-related skills; time-management skills and the ability to work under pressure; ethics-related skills; and leadership skills. Universities can also add compulsory internship or work experience programs to their curriculum.

This review of the literature on the issue of what employers need and seek in university graduates leads to some recommendations for future research as well. More human resource studies are needed that focus on the needs of the employers, rather than on what is needed from graduates of specific education programs. While education researchers focus on the education aspect of the issue, human resource researchers can focus on the human resource needs of organizations in terms of the qualities they need and seek from new graduate employees.

Both quantitative and qualitative studies are needed, as Rivera (2011) shows that employers may say they value a quality simply because this quality is reflective of another quality. Qualitative research is a useful tool with which to clarify the underlying reasons for such preferences.

The skills employers require may differ not only from industry to industry but also from department to department, such as marketing, finance, human resources, and research and development. Hence, there is a need for studies that focus on the human resource needs of industries as well as of departments across industries. With the help of these studies, students who hope to work in these departments, regardless of their educational background (e.g., an economics graduate who wants to work in the marketing department of a financial institution or a psychology student who wants to work in the sales department), can work on developing their skills accordingly.

Based on semi-structured interviews with twenty employers in the UK, Austria, Slovenia, and Romania, Andrews and Higson (2008) find that employers' perceptions of the skills and competencies graduates need are similar in all four countries. More inter-cultural studies are needed in order to clarify the similarities and differences among cultures in the qualities organizations need from new graduate employees.

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