



2nd International Conference on Higher Education Advances, HEAd'16, 21-23 June 2016,
València, Spain

Emotional intelligence and graduates – employers' perspectives

Ailish Jameson^{a*}, Aiden Carthy^a, Colm McGuinness^a and Fiona McSweeney^b

^a School of Business and Humanities, Institute of Technology, Blanchardstown (ITB), Blanchardstown Road North, Dublin 15, Ireland

^b School of Languages, Law and Social Sciences, Dublin Institute of Technology (DIT), Grangegorman, Dublin 7, Ireland

Abstract

Research has demonstrated that employers favour graduates who possess higher levels of emotional intelligence. Many initiatives to increase students' levels of EI have involved 'whole school' approaches, whereby generic EI skills programmes are delivered to all students in a third level institute. This paper details an initial survey of employers' (n = 500) opinions on the importance and current level of graduates' social and emotional competencies. The survey was completed across five sectors: engineering, IT/computing, professional services (including accounting, business, finance, HR, law, retail), science (including pharmaceutical and life), and social science which are identified growth industries in Ireland. It sought to explore employers' perspectives to determine if there are differences in terms of social and emotional competency requirements among graduates, across different employment sectors. Preliminary survey findings demonstrated a major disparity between the degree of importance attributed by employers to emotional intelligence competencies and the current levels displayed by graduate employees. This potentially represents a significant opportunity to enable students to develop those specific skills most favoured by employers in their chosen career areas, thereby possibly increasing their employability and success at work.

© 2016 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the organizing committee of HEAd'16

Keywords: emotional intelligence; graduates; education; employability

* Corresponding author.

E-mail address: ailish.jameson@itb.ie

1. Introduction

Theorists claim that in the 20th century the “driving force of intelligence” was IQ but for the 21st century it will be emotional intelligence (Zeidner, Matthews and Roberts, 2004, p. 379). Emotional intelligence has been defined as “a set of skills that enables us to make our way in a complex world - the personal, social and survival aspects of overall intelligence, the elusive common sense and sensitivity that are essential to effective daily functioning” (Stein and Book 2011, p. 14). To date, generic EI skills programmes have been delivered to all students in a given university with no attempt being made to develop a range of programmes explicitly aimed at targeting specific populations of students, for example, final year students. This potentially represents a significant gap in skills development among graduates. The current paper summarises findings from an employer survey which forms part of phase one of a larger research project aimed at addressing this skills gap through the design and delivery of a range of discipline specific modules to final year students, aimed at increasing particular emotional and social skills associated with employability. This may offer a solution to the challenge of embedding graduate attribute development in the curricula offered to students. Preliminary findings from this survey will be presented, however, background information on emotional intelligence will also first be discussed.

2. Literature Review

2.1. What is emotional intelligence?

In recent decades, interest in examining emotional intelligence in the workplace has become more prominent. Previous research confirms that higher levels of EI are positively correlated with increased career success (Cherniss, 2000; Lopes, Kadis, Grewal, Gall and Salovey 2006) and that although employers seek graduates with higher levels of emotional intelligence, they frequently believe that students lack such abilities (National Association of Colleges and Employers, 2008). EI has been found to be the basis for an extensive range of critical personal and social competencies required in the workplace, for example, self-awareness, self-management, social awareness and relationship management skills, with one study finding that it accounts for 58% of job performance across all sectors of employment (Bradberry and Greaves, 2009). There are three commonly accepted models of emotional intelligence: trait, ability and mixed (Caruso, 2008 in Emmerling, Shanwal and Mandal). Trait emotional intelligence is at the lower end of personality hierarchies and according to Petrides (2010) consists of 15 facets, which are subsumed into four broad areas: well-being, self-control, emotionality and sociability. The Ability model belongs in the domain of emotion related cognitive ability (Petrides, 2011). The Bar-On mixed model of emotional intelligence - which is the focus of this research - assumes EI to consist of both trait and ability related constructs and presents five broad areas of functioning which are deemed related to life success: intrapersonal skills, interpersonal skills, adaptability skills, stress management skills and general mood. The Bar-On model has been instrumental in developing the Emotional Quotient Inventory (EQ-i) which was revised in 2011 to the EQ-i 2.0 (Multi-Health Systems Inc), and adopts a self report means of measuring social and emotional behaviour (Bar-On, 2006).

2.2. Emotional Intelligence, Graduate Attributes and Employability

Politics and diversity have led to many higher education institutions becoming more *corporate* resulting in the need for them to develop students' hard and soft skills, enhance competencies, knowledge, dispositions, attitudes and beliefs in order that graduates can participate in a “global knowledge-based economy” (Chan, Brown and Ludlow, 2014, p. 2). However, McArthur 2011 (p. 737) argues that there is now a “trend” in higher education to “re-design” and “re-brand” themselves in order to meet the demands of governments who view them as serving purely an economic role. Often, the transition phase from higher education to work life does not follow a clear and well-defined path, often resulting in it being a challenging and problematic time for graduates as they often feel ill-prepared for the challenges and reality of employment (Dahlgren, Solbrette, Karseth and Nyström 2014 in Billett, Harteis and Gruber). This has led to the concept of graduate attributes which Barrie 2009 states are: (i) the important elements that students should learn, (ii) learning outcomes of a university education, (iii) graduates as contributors to society both as citizens and as workers and, (iv) graduates who will act as agents of social change in a dynamic and

uncertain world. While it is accepted that embedding graduate attributes into the curriculum can pose significant challenges due to poor resourcing and training for staff (de la Harpe and David 2012), this paper will now examine two initiatives, one in Scotland and one in Ireland, which aim to address graduate attribute development and employability.

In Scotland, the University of Aberdeen has embedded employability into all academic courses (Perkins, 2015) and four key graduate attribute areas are targeted for student skill development: academic excellence, critical thinking and effective thinking, learning and personal development and active citizenship (Baker, Pryor and Perkins, n.d.). The STAR (Students Taking Active Roles) award recognises students taking responsibility and developing their graduate attributes and adopts a particular framework with distinctive elements. For example, use of an e-portfolio by students has a dual purpose of being a presentation and a reflective tool. A new “enhanced transcript” has been introduced to record not solely course modules and final grades, but also approved co-curricular activities such as the STAR Award (University of Aberdeen 2015). In Ireland, in the Institute of Technology sector, employability skills development were introduced for students and focus on developing key attributes in graduates which would prepare them for entering the workforce (Dublin Institute of Technology (DIT) Learning, Teaching and Technology Centre (LTTC) n.d.). This is achieved through integration of graduate attribute material in teaching programmes, through specialist module options and through extra-curricular activities. In 2007 a set of graduate attributes were developed which included emotional intelligence under the graduate attribute ‘effective’. By being emotionally intelligent graduates will have developed the skills of self-awareness, self-management in terms of mood, and will use their emotions to self-motivate and work towards goal achievement. Teaching staff are encouraged to use a facilitative or coaching role in their teaching to include opportunities for team based learning and advocating student responsibility for learning and performance. Work placements are viewed as important opportunities for students to identify emotional intelligence competencies that are required in their specialist area and to develop such skills (DIT LTTC n.d.). The data gathered from the survey and follow up interviews with employers aim to build on programmes currently in place, leading to EI coaching which is tailored to five specific disciplines.

3. Method

This research adopts the tenets of pragmatism where the focus is on what “works in practice” and lends itself to a mixed methods approach to social research (Johnson and Christensen 2012, p. 32). Previous attempts to improve students’ social and emotional competencies have involved ‘whole school’ approaches, whereby generic EI skills development programmes are designed and delivered to all of the students in a given college. As of yet, no attempt has been made to develop a range of programmes aimed at targeting specific populations of students. Therefore, this represents a significant gap in current knowledge. Phase one was a comprehensive survey of employers in five sectors of industry: engineering, IT/computing, professional services (including accounting, business, finance, law, human resources and retail), science (including pharmaceutical and life) and social science. These five sectors are identified top growth industries in Ireland (Kilmartin 2010). Employers were recruited from three sources, (i) the Irish Times[†] lists of Top 100 companies in each sector within Ireland, (ii) the GradIreland[‡] website of graduate employers, and (iii) meetings with careers officers. In addition, careers fairs were attended in Dublin City University (DCU) and in the RDS[§] and contact was made with employers at both events who agreed to participate in the research. Random probability sampling was initially adopted and all employers across the five sectors had an equal chance of being selected. In order to triangulate and further verify this quantitative data, phase one will conclude with in-depth qualitative interviews with senior managers from each sector.

[†] The Irish Times is an Irish daily broadsheet newspaper

[‡] GradIreland is the official careers and further study organisation for students and graduates in the Republic of Ireland and Northern Ireland

[§] The Royal Dublin Society (RDS) is in Dublin 4 and used for exhibitions, concerts and sporting events

4. Preliminary Findings

4.1. Phase One - employer survey

There were a total of 238 responses to the survey, 88 (37.0%) were male, 148 (62.2%) were female with 2 (0.8%) non-response. There were 30 (13%) responses in the engineering sector, 39 (16%) in IT/computing, 45 (19%) in professional services, 22 (9%) in science, 97 (41%) in social science, 1 (.4%) in sports development and 4 (2%) non-responses which were excluded from the final sample. Employers were given a list of ten social and emotional competencies which were selected from the Emotional Competence Framework proposed by Goleman 1998. These were: (1) emotional self-awareness (recognising one's emotions and their effects), (2) emotional self-control (keeping disruptive emotions and impulses in check), (3) initiative (readiness to act on opportunities), (4) motivation (focused and committed to the goals of the team and the organisation), (5) adaptability (flexibility in handling change), (6) positive outlook (persistence in pursuing goals despite obstacles and setbacks), (7) empathy (sensing others' feelings and perspectives, and taking an active interest in their concerns), (8) communication (listening openly and sending convincing messages), (9) conflict management (negotiating and resolving disagreements) and (10) teamwork (working with others toward shared goals). Employers were, in the first instance asked to rate each competence in terms of its importance for graduates to possess in their workplace, on a scale of 5 (very important) to 1 (not important at all) the degree of importance of the ten competencies. Table 1 presents these findings.

Table 1. Employer ratings of importance of ten competencies

Competency	Very Important	Important	Neutral	Somewhat Important**	Not Important at all	Total
Emotional self-awareness	119 51.3%	91 39.2%	15 6.5%	6 2.6%	1 0.4%	232 100.0%
Emotional self-control	138 59.5%	77 33.2%	10 4.3%	6 2.6%	1 0.4%	232 100.0%
Initiative	137 59.3%	82 35.5%	10 4.3%	1 0.4%	1 0.4%	231 100.0%
Motivation	173 74.6%	55 23.7%	3 1.3%	1 0.4%	0 0.0%	232 100.0%
Adaptability	140 60.6%	84 36.4%	5 2.2%	2 0.9%	0 0.0%	231 100.0%
Positive Outlook	146 63.2%	76 32.9%	7 3.0%	2 0.9%	0 0.0%	231 100.0%
Empathy	109 47.2%	90 39.0%	26 11.3%	6 2.6%	0 0.0%	231 100.0%
Communication	161 69.7%	60 26.0%	8 3.5%	2 0.9%	0 0.0%	231 100.0%
Conflict Management	106 45.9%	95 41.1%	22 9.5%	8 3.5%	0 0.0%	231 100.0%
Teamwork	164 71.0%	60 26.0%	7 3.0%	0 0.0%	0 0.0%	231 100.0%

Employers were then asked to rate each of the ten competencies, on a scale of 5 (excellent) to 1 (poor), in respect of the current level of competence demonstrated by graduates. Table 2 presents these findings.

** This scale is not ideal as the corresponding survey response should have read 'Unimportant'. This was due to a design error which was overlooked. As the responses were mainly in the higher end of the scale it is not envisaged that this represented a significant effect on findings.

Table 2. Employer ratings of current level of competency demonstrated by graduates

Competency	Excellent	Very Good	Good	Fair	Poor	Total
Emotional self-awareness	4 1.8%	58 25.4%	100 43.9%	56 24.6%	10 4.4%	228 100.0%
Emotional self-control	9 4.0%	75 33.2%	99 43.8%	36 15.9%	7 3.1%	226 100.0%
Initiative	19 8.4%	69 30.4%	79 34.8%	48 21.1%	12 5.3%	227 100.0%
Motivation	30 13.3%	91 40.3%	74 32.7%	27 11.9%	4 1.8%	226 100.0%
Adaptability	19 8.4%	86 38.1%	79 35.0%	38 16.8%	4 1.8%	226 100.0%
Positive Outlook	23 10.1%	75 32.9%	87 38.2%	40 17.5%	3 1.3%	228 100.0%
Empathy	17 7.5%	65 28.8%	81 35.8%	50 22.1%	13 5.8%	226 100.0%
Communication	16 6.9%	76 33.5%	84 37.0%	46 20.3%	5 2.2%	227 100.0%
Conflict Management	7 3.1%	36 15.9%	83 36.6%	81 35.7%	20 8.8%	227 100.0%
Teamwork	32 14.1%	101 44.5%	76 33.5%	16 7.0%	2 0.9%	227 100.0%

It is interesting to note that for eight of the ten competencies listed, over 45.9% (n=106) of employers rated all ten competencies as 'very important', with 74.6% (n=173) of employers rating 'motivation' and 71.0% (n=164) rating 'teamwork' as 'very important'. Findings also show that over 86.2% (n=199) of employers deem all of the ten competencies as either 'very important' or 'important'. 0.4% of employers (n = 3) rated three of the ten competencies, emotional self-awareness (n=1), emotional self-control (n=1) and initiative (n=1) as 'not important at all'. In addition, findings demonstrated that less than 14.1% (n=32) of employers rated the current level of competence among graduates as 'excellent' across all ten competencies, with highest ratings of 'excellent' found for 'teamwork' (14.1%) (n=32) and 'motivation' (13.3%) (n=30). Highest ratings of 'good' were found for seven of the competencies, with the exception of 'motivation', 'adaptability' and 'teamwork' where highest ratings were found under 'very good'. 35.7% (n=81) of employers rated the typical level of competence in 'conflict management' as 'fair' among graduates. Between 0.9% (n=2) and 8.8% (n=20) of employers rated current levels of competence across all ten competencies as 'poor' among graduates.

Figure 1 presents a breakdown of means in terms of competency importance across the five sectors, including 95% confidence intervals for the grand mean.

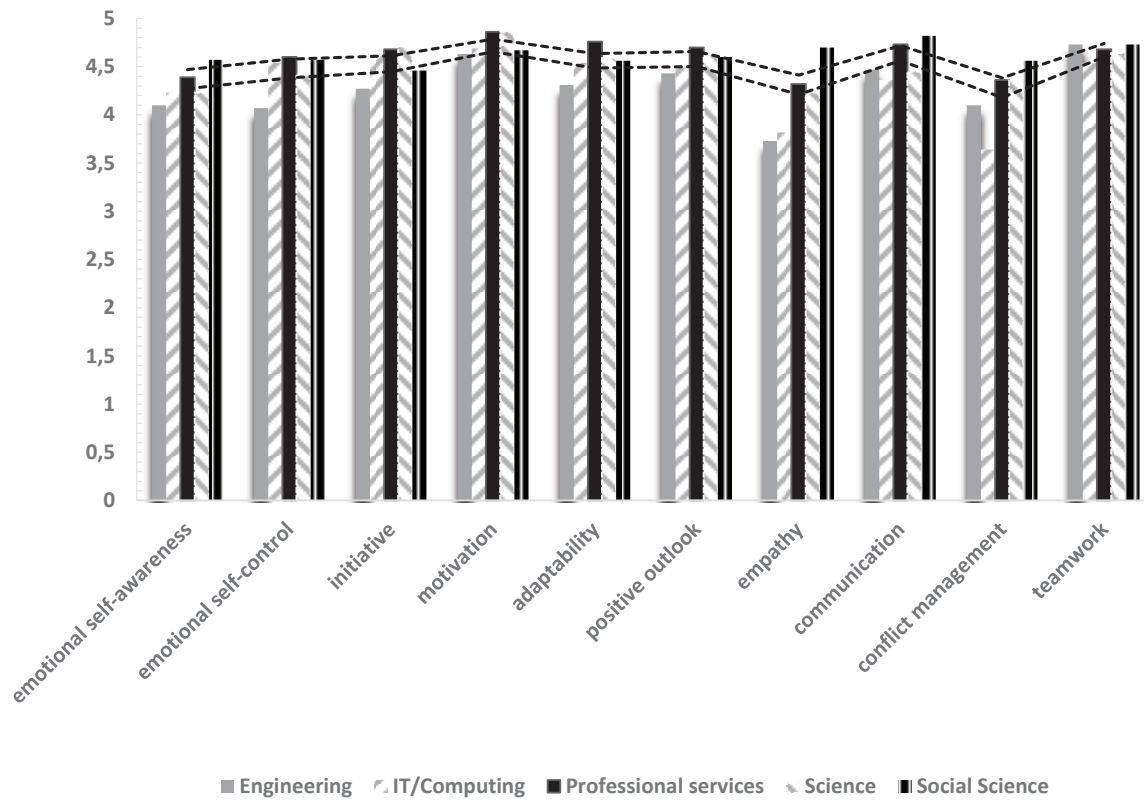


Figure 1. Breakdown of means in terms of competency importance across the five sectors (including 95% confidence intervals for the grand mean)

Figure 2 presents a breakdown of the means in terms of the current level of competency demonstrated by graduates entering the workplace, across the five sectors, including 95% confidence intervals for the grand mean.

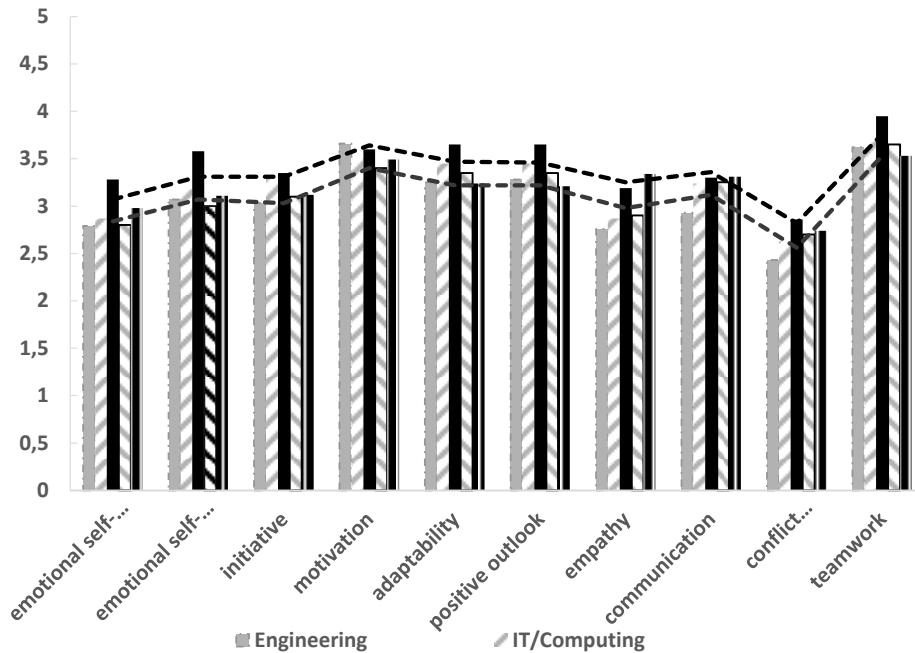


Figure 2. Breakdown of means in terms of current levels of competency among graduates across the five sectors (including 95% confidence intervals for the grand mean)

Across all five sectors, mean ratings of ‘very important’ or ‘important’ were found for all ten competencies. Interestingly, there were no mean ratings equivalent to ‘excellent’ or ‘very good’ in respect of the ten competencies.

4.2. Additional comments by employers

Employers were then given the opportunity to provide additional comments that they deemed relevant to the survey. For example, if there were competencies that were important for their organisation that were not included in the list of ten, an opportunity was given here for them to incorporate them at this stage. Social awareness and confidence were highlighted by the engineering and social science sectors as important, and the ability to “*recognise potential stressful situations for colleagues*” noted. Emotional self-awareness was highlighted by both the engineering and science sectors as critical and graduates must be able to “*recognise their own emotions and know how to deal with them*” to help them progress in the organisation and gain confidence. In the IT/computing, professional services and science sectors, communication was highlighted specifically in terms of cultural awareness “*receiving feedback*” and “*dealing with disappointment*”. Initiative and resilience was an issue with a need for graduates to be “*proactive not reactive*”, to persevere and “*not give up when things don’t go to plan*”. Self-regulation was highlighted in terms of having the “*ability to attain, maintain and change one’s level of arousal appropriately for a task or situation*”.

5. Conclusion

Preliminary findings from the survey identify a perception from employers of deficits in some social and emotional competencies among graduates who are entering the workplace. Phase one will conclude with qualitative interviews with a sample of senior managers across the five sectors. Phase two will involve the design of specifically tailored modules, for use with final year students in courses that will be chosen that relate to each of the

five sectors specified above. A voluntary sample of final year students across each of the five disciplines will be selected and EI testing completed. Students will then be assigned to a control or an experimental group and the intervention (i.e. the tailored emotional competency modules) will be delivered. Part of this EI coaching will involve a competency based interview for each student with an employer in their discipline to assess the effectiveness of the coaching. Phase three will involve a follow up survey and/or interview with employers to assess the use of the EI coaching as an intervention to address social and emotional skills development. Students in the control group will also then be offered the coaching. It is anticipated that the design of domain specific EI modules based on survey and interview data gathered from employers will lead to a high quality suite of coaching modules being delivered to final year students. This coaching may potentially result in rewards for graduates and employers in terms of career choice, increased job satisfaction, workplace performance, stress management and increased productivity, leading to a workforce who are socially and emotionally competent to skilfully navigate their way in a complex, demanding and dynamic global economy.

References

- Baker, K., Pryor, M. and Perkins, J. (nd) Achieving graduate attributes: making the implicit explicit (Retrieved 7/5/15 from <http://www.enhancementthemes.ac.uk/docs/tipzone-article/achieving-graduate-attributes-making-the-implicit-explicit.pdf?sfvrsn=20>)
- Bar-On, R. (2006), The Bar-On Model of emotional-social intelligence (esi), *Psicothema*, 18, suppl, 13-25)
- Barrie S.C. (2009) *Understanding what we mean by the generic attributes of graduates* Australia: Institute for Teaching and Learning University of Sydney (Retrieved 28 August 2015 from <http://www.itl.usyd.edu.au/GraduateAttributes/barriepaper.pdf>)
- Bradberry, T. and Greaves, J. (2009), *Emotional Intelligence 2.0*, CA: TalentSmart
- Caruso, D.R. (2008) Emotions and the Ability Model of Emotional Intelligence in Emmerling, R.J., Shanwal, V.K. and Mandal, M.K. (eds), *Emotional Intelligence Theoretical and Cultural Perspectives*, New York: Nova Science Publishers Inc.
- Chan, R.Y., Brown, G.T.L. and Ludlow, L.H. (2014), What is the purpose of higher education? A comparison of institutional and student perspectives on the goals and purposes of completing a bachelor's degree in the 21st century (Retrieved 4 September 2015 from http://www.dal.ca/content/dam/dalhousie/pdf/clt/Events/Chan_Brown_Ludlow%282014%29.pdf)
- Cherniss C. (2000) *Emotional Intelligence: What it is and why it matters*. Paper presented at the annual meeting of the Society for Industrial and Organizational Psychology, New Orleans, U.S.A.
- Dahlgren, M.A., Solbrenke T.D., Karseth, B. and Nyström, S. (2014) From University to Professional Practice: Students as Journeymen Between Cultures of Education and Work in Billett, S. Harteis, C. and Gruher, H. (eds) *International Handbook of Research in Professional and Practice-based Learning*, Dordrecht: Springer
- de la Harpe, B. and David, C. (2012) Major influences on the teaching and assessment of graduate attributes, *Higher Education Research & Development*, 31:4, 493-510 DOI: 10.1080/07294360.2011.629361
- Dublin Institute of Technology (DIT) Learning, Teaching and Technology Centre (LTTTC) (nd) *DIT Graduate Attributes: Enhancing student employability* (Retrieved 13 April 2015 from <http://www.dit.ie/lttc/aboutthelttc/lttcspotlight/ditgraduateattributes/>)
- Goleman, D. (1998) *Working with Emotional Intelligence*, US: Bantam Books
- Johnson, B. and Christensen L. (2012), Educational Research, Quantitative, Qualitative and Mixed Approaches (4th ed), CA: SAGE Publications Inc. (Retrieved 1 November 2015 from https://uk.sagepub.com/sites/default/files/upm-binaries/38123_Chapter2.pdf)
- Kilmartin, D. (2010), *The Six Top Growth Industries in Ireland* (Retrieved on 28/4/15 from <http://campus.ie/surviving-college/job-news/six-top-growth-industries-ireland-today>)
- Lopes, P.N., Grewal, D., Kadis, J., Gall, M. and Salovey P. (2006) Evidence that emotional intelligence is related to job performance and affect and attitudes at work *Psicothema* Volume 18(1): 132-138
- McArthur, J. (2011) Reconsidering the social and economic purposes of higher education, *Higher Education Research & Development*, Vol 30, No. 6, 737-749
- Multi Health Systems website, *Differences between EQ-i 2.0 and EQ-i* (Retrieved 3 November 2015 from https://ei.mhs.com/webhelp/EQ-i_2_Overview/Differences_between_EQ-i_2.0_and_EQ-i.htm)
- National Association of Colleges and Employers (NACE) (2008) *Job Outlook Survey 2008*. PA: NACE
- Perkins, J. (2015) Educational and Employability Development Adviser, Careers Service/Centre for Academic Development, University of Aberdeen email 4/5
- Petrides, K.V., (2010), Trait Emotional Intelligence Theory, *Industrial and Organizational Psychology*, 3, 136-139
- Petrides, K.V. (2011), Ability and Trait Emotional Intelligence in Chamorro-Premuzic T., von Stumm, S. and Furnham, A. (eds), *The Wiley-Blackwell Handbook of Individual Differences, First Edition*, UK: Blackwell Publishing Ltd.
- Stein, S. and Book, H.E. (2011), *The EQ Edge: Emotional Intelligence and Your Success (third edition)*, US: Multi-Health Systems Inc.
- University of Aberdeen (2015) *Follow-up Report to the Enhancement Led Institutional Review (ELIR)*, March, Scotland: QAA
- Zeidner, M., Matthews, G. and Roberts, R.D. (2004), Emotional Intelligence in the Workplace: A Critical Review, *Applied Psychology: An International Review*, 53 (3), 371-399