

Central Lancashire Online Knowledge (CLoK)

Title	Teaching emotional intelligence and emotional self-efficacy in higher education
Type	Article
URL	https://clock.uclan.ac.uk/33180/
DOI	
Date	2013
Citation	Dacre-Pool, Lorraine (2013) Teaching emotional intelligence and emotional self-efficacy in higher education. <i>The Psychology of Education Review</i> , 37 (2). pp. 26-32. ISSN 1463-9807
Creators	Dacre-Pool, Lorraine

It is advisable to refer to the publisher's version if you intend to cite from the work.

For information about Research at UCLan please go to <http://www.uclan.ac.uk/research/>

All outputs in CLoK are protected by Intellectual Property Rights law, including Copyright law. Copyright, IPR and Moral Rights for the works on this site are retained by the individual authors and/or other copyright owners. Terms and conditions for use of this material are defined in the <http://clock.uclan.ac.uk/policies/>

Teaching Emotional Intelligence and Emotional Self-Efficacy in Higher Education

Lorraine Dacre Pool, PhD,
University of Central Lancashire
Preston, PR1 2HE, UK
ldacre-pool@uclan.ac.uk

Abstract

Emotional Intelligence is a widely researched topic with established associations between health, wellbeing and work-related outcomes. The concept of Emotional Self-Efficacy is a relatively recent, but potentially important, addition to the emotional intelligence literature. Despite the interest in this area there are very few empirical studies that demonstrate it is possible for people to increase their levels of emotional competence. The study discussed in this paper involved the design, delivery and evaluation of an undergraduate teaching intervention that aimed to do this. The findings show that it is possible to increase Emotional Self-Efficacy and some aspects of Emotional Intelligence ability. Providing students in Higher Education with opportunities to develop their competence in this area will be beneficial both for their experiences whilst at university and their future employability as graduates entering the workforce.

Introduction

Emotional Intelligence (EI) is still a relatively new research area, but one that is expanding at a rapid rate. The last two decades have seen an increasing amount of attention paid to the subject with considerable debate about its different conceptualisations. One group of researchers define EI as a type of cognitive ability involving the perception, use, understanding and management of emotion (known as the Four Branch Model of EI: Mayer & Salovey, 1997; Mayer, Salovey & Caruso, 2004); another group of researchers define EI as a personality trait (e.g. Petrides, Pita & Kokkinaki, 2007). The two viewpoints are usually termed 'ability' and 'trait' EI respectively. Different measurement methods are utilised dependent upon the EI perspective taken: ability EI uses performance-based measures and trait EI utilises self-

report methodology. A more recent addition to the literature is concerned with how efficacious people are in their EI ability, termed Emotional Self-Efficacy (Kirk, Schutte & Hine, 2008). Self-efficacy refers to a person's beliefs concerning their ability to successfully perform a particular behaviour (Bandura, 1977, 1995). Emotional Self-Efficacy (ESE) is defined as beliefs in one's emotional functioning capabilities (Dacre Pool & Qualter, 2012a). Higher levels of ESE enable a person to deal more effectively with emotional experiences because they believe they have the capacity to do so (Saarni, 1999). Therefore, it would be reasonable to predict that people with higher levels of ESE are more likely to use their EI ability.

Context of Study

Developing EI and ESE in undergraduates could be useful for their overall graduate development and future career prospects and in a recent study (Dacre Pool & Qualter, 2012b) we show that EI and ESE can be improved through an intervention. This paper provides a summary of the design, delivery and evaluation of this study, together with some qualitative statements from students.

In the intervention paper, we argue that given the high level of social interaction required in most workplaces, EI is an essential aspect of graduate employability (Dacre Pool & Sewell, 2007). There is research evidence to suggest that people with higher levels of EI are more socially competent, enjoy better quality relationships and are viewed as more sensitive to others than those lower in EI (Mayer, Roberts & Barsade, 2008). Higher levels of EI are also associated with stress-tolerance and contributions to a positive work environment (Lopes, Grewal, Kadis, Gall & Salovey, 2006), negotiation skills (Mueller & Curhan, 2006), customer retention (Kidwell, Hardesty, Murtha &

Sheng, 2011) and overall work performance (O'Boyle, Humphrey, Pollack, Hawver & Story, 2010). It could be argued that a potential for leadership is a desirable attribute in graduate recruits; EI may have a strong influence in this area. Leaders who can utilise their emotions and their emotional knowledge constructively, are likely to have certain advantages over others who can not (Mayer & Caruso, 2002), and there is evidence to suggest that an individual's level of EI may be a key predictor of leadership success (Kerr, Gavin, Heaton & Boyle, 2006). EI is, therefore, likely to be a key attribute that will enable graduates to make a positive impact both in the workplace and other areas of their lives. There is now a considerable amount of research to suggest that EI provides the basis for a number of social and emotional competencies that are critical for success in almost any occupation and that as the pace of organisational change increases, this set of abilities is likely to increase in importance (Cherniss, 2000).

ESE is still a relatively new concept and as such there are currently only a few empirical studies that provide evidence of its importance for educational-related outcomes. It has been found to help school children and university students manage the negative effects of anxiety in relation to mathematics testing (Galla & Wood, 2012; Tariq, Qualter, Roberts, Appleby, & Barnes, 2013) and predict academic performance amongst boys (Qualter, Gardner, Pope, Hutchinson, & Whiteley, 2012). Additionally, a recent study found that it predicts self-perceived employability in a graduate population, suggesting it plays a role in terms of how confident graduates are in their ability to choose, secure and retain satisfying occupations (Dacre Pool & Qualter, 2013).

The research evidence suggests that EI and ESE are important to develop in undergraduate students; therefore, it is necessary to establish whether or not these can be improved through teaching and learning activities. If we accept the ability EI

conceptualisation, as opposed to the trait EI version (personality traits are considered relatively stable and difficult to change) it should be possible to develop and improve, possibly by increasing knowledge and understanding of emotions and by teaching some strategies to enable students to manage their own emotions more effectively. However, it is imperative that any EI/ESE courses are based on a clear, theoretically sound model of EI and do not purely consist of materials gathered from pre-existing courses that may be related to EI but are not equivalent (Gohm, 2004). Such a theoretical model is provided by Mayer & Salovey (1997) who suggest that EI comprises four abilities: perceiving emotion, using emotion, understanding emotion and managing emotion (the Four Branch Model of EI). This model was used as a framework for the development of a teaching intervention designed for use with undergraduate students, with the intention of improving their ability EI and ESE.

Design and Delivery of the EI intervention (Dacre Pool & Qualter, 2012b).

The EI module was designed as a level 5 (2nd or 3rd year undergraduate) taught module. It was offered as a free choice elective subject to students from any discipline, who were able to include the module in their timetable (between academic years 2008/9 and 2010/11). The classes all had the same tutor and ranged in size from 4 students to 18 students. Teaching took place once a week over 11 weeks for 2 hours each week. Learning experiences and activities were designed around the Four Branch Model of EI, with classes to address: i) perception of emotion; ii) using emotion; iii) understanding emotion and iv) managing emotion. The students completed measures of ability EI and ESE during the first class and were then given a detailed report, together with one-to-one feedback on their results. The tests were repeated in the final class and further one-to-one

feedback provided. The students were asked to keep a journal throughout the 11 week module which enabled them to reflect on the class activities each week and consider how they could apply any new knowledge to their own experiences. Teaching methods included mini-lectures (incorporating EI theory), video clips, case-studies, group tasks, class discussions, role play and an off-campus visit to an art gallery. The intended outcome of the module was an increase in the students' levels of ability EI and ESE through a process of theory, practice and reflective learning.

Evaluation of the EI Intervention. Summary of method and findings (Dacre Pool & Qualter, 2012b)

The evaluation included undergraduate students from a large university in the North-West of England. They were from a wide range of subject disciplines, including Psychology, Police & Criminal Investigations, Japanese Studies, Business, Public Relations and Fashion. There were 134 participants: 66 who took part in the intervention (male = 31; female = 35, mean age = 24 years, $SD = 8.06$) and 68 in a control group (male = 29; female = 39, mean age = 22 years, $SD = 3.33$). All participants were in either their second or third year at university.

The students completed the online version of the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT, V2.0, Mayer, Salovey & Caruso, 2002) and a pen and paper version of the Emotional Self-Efficacy Scale (ESES), developed by Kirk et al. (2008). A revised scoring system of the ESES which includes 27 of the original items (Dacre Pool & Qualter, 2012a) was used for this study. The items make up four subscales: (1) using and managing own emotions; (2) identifying and understanding

own emotions; (3) dealing with emotions in others; (4) perceiving emotion through facial expression and body language.

An indirect measure of cognitive ability was also included (mean score of all first year undergraduate modules). Participants in the intervention group completed the measures during the first class (before any teaching took place) and during the final class. The control group participants were recruited from two other elective modules, one concerned with career planning and another with starting a business, which are taught in a similar way (workshop style). They completed the same pre and post intervention measures within the same week as the intervention group. The control group participants also received one-to-one feedback and a report with details of their test results.

The results of eight mixed group (intervention vs. control) x time (time 1 vs. time 2) repeated measures ANCOVAs, can be seen in Table 1. Significant group x time interactions were found in respect of MSCEIT branches 'Understanding Emotion' and 'Managing Emotion'. No significant interactions were found for the MSCEIT branches 'Perceiving Emotion' or 'Using Emotion'. Significant group x time interactions were found for all four subscales of the ESES. This indicates a significant effect of the EI intervention on ability EI (Understanding and Managing branches) and Emotional Self-Efficacy. Effect sizes suggest medium to large effects (Pallant, 2007, p 208). Group x time x gender ANCOVAs were also carried out, revealing no significant interactions. This would suggest that the EI intervention is effective for both male and female students.

Table 1. Mixed design ANCOVAs for time x group interaction

Variables	Intervention Group		Control Group		ANCOVA	Partial η^2
	T1 Mean (SD)	T2 Mean (SD)	T1 Mean (SD)	T2 Mean (SD)		
MSCEIT Branch 1 ¹	92.66 (12.33)	94.85 (14.48)	93.44 (12.91)	92.66 (11.71)	F(1,91) = .87	.01
MSCEIT Branch 2 ¹	96.79 (15.39)	96.52 (15.04)	103.16 (15.63)	102.09 (16.05)	F(1,91) = .17	.00
MSCEIT Branch 3 ¹	100.66 (18.00)	107.76 (21.54)	100.34 (16.80)	98.09 (12.62)	F(1,91) = 8.90 **	.09
MSCEIT Branch 4 ¹	93.23 (11.43)	98.79 (14.19)	91.38 (9.31)	92.03 (9.18)	F(1,91) = 4.88 *	.05
ESES Subscale 1 ²	31.07 (8.06)	37.45 (7.27)	32.17 (5.97)	34.46 (5.87)	F(1,106) = 7.96 **	.07
ESES Subscale 2 ²	20.44 (4.30)	26.13 (4.74)	21.67 (4.00)	23.06 (4.22)	F(1,106) = 18.45 **	.15
ESES Subscale 3 ²	25.09 (6.52)	30.47 (5.59)	29.11 (4.19)	29.24 (4.19)	F(1,106) = 27.04 **	.20
ESES Subscale 4 ²	9.84 (2.75)	12.00 (2.43)	10.26 (2.42)	10.81 (2.47)	F(1,106) = 9.19 **	.08

Note:

1. Intervention Group N = 62, Control Group N = 32

2. Intervention Group N = 55, Control Group N = 54

MSCEIT Branch 1 = Perceiving Emotion, MSCEIT Branch 2 = Using Emotion, MSCEIT Branch 3 = Understanding Emotion, MSCEIT Branch 4 = Managing Emotion

ESES Subscale 1 = Using & Managing Own Emotions, ESES Subscale 2 = Identifying & Understanding Own Emotions, ESES

Subscale 3 = Dealing with Emotions in Others, ESES Subscale 4 = Perceiving Emotion through Facial Expressions and Body Language.

* $p < .05$, ** $p < .01$

Discussion

These findings indicate positive changes in both EI and ESE for male and female students. There were some positive, but smaller changes in ESE in the control group, which could be explained by their engagement with some of the learning experiences on their modules. These included some self-awareness activities together with opportunities to interact with other students and work together on group projects. It is possible that these resulted in more positive self-evaluations of emotional competence.

The significant improvements for the 'Understanding' and 'Managing' aspects of EI are noteworthy. The ability to 'Understand' emotion is a consistent predictor of leadership emergence (Côté, Lopes, Salovey & Miners, 2010) and as such could be crucial for graduate employability. 'Managing' emotion is strongly related to academic achievement (MacCann, Fogarty, Zeidner, & Roberts, 2011), better work performance (Joseph & Newman, 2010) and life satisfaction (Bastian, Burns, & Nettelbeck, 2005). As such this is also likely to impact on graduate employability. The intervention did not result in significant improvements to the 'Perceiving' or 'Using' emotions scores. This may be as a consequence of some measurement issues with the MSCEIT, which the authors themselves admit has limitations (Mayer et al., 2008). A more detailed discussion concerning the possible reasons for these findings can be found in Dacre Pool and Qualter (2012b).

The distinctly experiential learning model used in the design of this intervention appears to be particularly effective in helping students to develop their self-efficacy in relation to emotional competence.

There are some limitations to the study, which include the use of data gathered from a single source, the participants themselves. Future work might consider including

peer ratings of participants' EI pre and post intervention. It would also be interesting to conduct a further longitudinal study, which would follow the students after graduation and into the workplace. It would then be possible to investigate if higher levels of EI and ESE at university are predictors of graduate employability. Do these graduates choose, secure and retain occupations in which they feel satisfied and successful (Dacre Pool & Sewell, 2007)?

Finally, in addition to the quantitative analysis carried out, it is interesting to hear the evaluation of the intervention in the words of the students themselves. A selection of the evaluative comments can be seen below.

'I would definitely recommend the module to others and already have. Few modules in the university look at or help improve a person's 'people skills' or understanding of their emotions. It has not only improved my academic knowledge of EI and created a genuine topic of interest but has also given me a better understanding of myself, something few modules do.'

'I believe this module should be compulsory in the first year of every degree course due to the skills it teaches you that would be so beneficial not only in your studies but also in making friends and adapting to communal living.'

'I feel that I have learnt an awful lot and that it has helped me develop more as a person, through being able to understand my emotions and manage them in a suitable manner.'

'This has really helped me gain confidence within myself and has really changed my views on a lot of things. I feel like a new guy.'

'If I had my way this module would be required reading for all students. I believe it has the depth and significance to really make an impact on people's lives ... Emotional Intelligence has given me the confidence to develop my character and to be a more engaging, emotionally responsible and sensitive person.'

'Knowledge of emotional intelligence would be useful for all walks of life from management to the newest trainee and all students should be given the chance of a workable knowledge of the topic.'

'I do think it has given me the ability to interact with people in a more intelligent way.'

The major goal of education is to provide students with opportunities to develop their intellect and efficacy beliefs that enable them to become lifelong learners (Bandura, 1995). Within HE there has always been a strong emphasis on developing the intellectual aspects of learning, with far less attention paid to the emotional aspects. With evidence suggesting a symbiotic relationship between these two concepts and a real need for EI and ESE in the workplace, maybe the time has come to redress the balance and include opportunities for all students to develop the 'softer interpersonal' skills that are likely to help them whatever the future might hold.

References

- Bandura, A. (1977). Self-efficacy. Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191-215.
- Bandura, A. (1995). *Self-efficacy in Changing Societies*. Cambridge: Cambridge University Press.
- Bastian, V.A., Burns, N.R., & Nettelbeck, T. (2005). Emotional intelligence predicts life skills, but not as well as personality and cognitive abilities. *Personality and Individual Differences*, *39*, 1135-1145. DOI: 10.1016/j.paid.2005.04.006
- 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, LA, April 15, 2000.
- Côté, S., Lopes, P.N., Salovey, P., & Miners, C.T.H. (2010). Emotional intelligence and leadership emergence in small groups. *The Leadership Quarterly*, *21*, 496 – 508. doi: 10.1016/j.leaqua.2010.03.012
- Dacre Pool, L. & Qualter, P. (2012a). The dimensional structure of the Emotional Self-Efficacy Scale (ESES). *Australian Journal of Psychology*, *64*, 147–154. doi:10.1111/j.1742-9536.2011.00039.x
- Dacre Pool, L. & Qualter, P. (2012b). Improving emotional intelligence and emotional self-efficacy through a teaching intervention for university students. *Learning and Individual Differences*, *22*, 306-312. doi: 10.1016/j.lindif.2012.01.010
- Dacre Pool, L. & Qualter, P. (2013). Emotional self-efficacy, graduate employability, and career satisfaction: Testing the associations. *Australian Journal of Psychology*. doi: 10.1111/ajpy.12023

- Dacre Pool, L. & Sewell, P. (2007). The key to employability: developing a practical model of graduate employability. *Education + Training*, 49, 4, pp 277 – 289. doi:10.1108/00400910710754435
- Galla, B.M. & Wood, J.J. (2012). Emotional self-efficacy moderates anxiety-related impairments in math performance in elementary school-age youth. *Personality and Individual Differences*, 52, 118-122. doi: 10.1016/j.paid.2011.09.012
- Gohm, C. L. (2004). Moving Forward With Emotional Intelligence. *Psychological Inquiry*, 15, 3, 222 – 227.
- Joseph, D. L. & Newman, D. A. (2010). Emotional Intelligence: An Integrative Meta-Analysis and Cascading Model. *Journal of Applied Psychology*, 95, 1, pp 54 – 78. doi: 10.1037/a0017286
- Kerr, R., Garvin, J., Heaton, N. & Boyle, E. (2006). Emotional intelligence and leadership effectiveness. *Leadership & Organization Development Journal*, 27, 4, pp 265 – 279.
- Kidwell, B., Hardesty, D.M., Murtha, B.R. & Sheng, S. (2011). Emotional Intelligence in Marketing Exchanges. *Journal of Marketing*, 75, 78 – 95. doi: 10.1509/jmkg.75.1.78
- Kirk, B. A., Schutte, N. S. & Hine, D. W. (2008). Development and preliminary validation of an emotional self-efficacy scale. *Personality and Individual Differences*, 45, pp 432 – 436. doi: 10.1016/j.paid.2008.06.010
- Lopes, P. N., Grewal, D., Kadis, J., Gall, M. & Salovey, P. (2006). Evidence that emotional intelligence is related to job performance and affect and attitudes at work. *Psicothema*, 18, pp132 – 138.

- MacCann, C., Fogarty, G.J., Zeidner, M. & Roberts, R.D. (2011). Coping mediates the relationship between emotional intelligence (EI) and academic achievement. *Contemporary Educational Psychology*, 36, 60-70. doi: 10.1016/j.cedpsych.2010.11.002
- Mayer, J. D. & Caruso, D. (2002). The effective leader: Understanding and applying emotional intelligence. *Ivey Business Journal*, Nov/Dec 2002.
- Mayer, J. D., Roberts, R. D. & Barsade, S. G. (2008). Human Abilities: Emotional Intelligence. *Annual Review of Psychology*, 59, 507-536. doi:10.1146/annurev.psych.59.103006.093646
- Mayer, J. D. & Salovey, P. (1997). What Is Emotional Intelligence? In P Salovey & D Sluyter (Eds). *Emotional Development and Emotional Intelligence: Implications for educators* (pp 3 – 31). New York: Basic Books.
- Mayer, J. D., Salovey, P. & Caruso, D. R. (2002). *Mayer-Salovey-Caruso Emotional Intelligence Test – MSCEIT. User’s Manual*. Toronto: Multi-Health Systems Inc.
- Mayer, J. D., Salovey, P. & Caruso, D. R. (2004). Emotional Intelligence: Theory, Findings and Implications. *Psychological Inquiry*, 15, 3, 197-215. doi: 10.1207/s15327965pli1503_02
- Mueller, J. & Curhan, J. (2006). Emotional intelligence and counterpart mood induction in a negotiation. *International Journal of Conflict Management*, 17, pp 110 – 128. doi: 10.1108/10444060610736602
- O’Boyle, Jr., E.H., Humphrey, R.H., Pollack, J.M., Hawver, T.H., & Story, P.A. (2010). The relation between emotional intelligence and job performance: A meta-analysis. *Journal of Organizational Behavior*. doi: 10.1002/job.714

- Pallant, J. (2007). *SPSS Survival Manual, Third Edition*. Maidenhead: Open University Press.
- Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology*, 98, 273-289. doi: 10.1348/000712606x120618
- Qualter, P., Gardner, K.J., Pope, D., Hutchinson, J.M., & Whiteley, H.E (2012). Ability emotional intelligence, trait emotional intelligence, and academic success in British secondary schools: A 5-year longitudinal study. *Learning and Individual Differences*, 22, 83-91. doi: 10.1016/j.lindif.2011.11.007
- Saarni, C. (1999). *The Development of Emotional Competence*. New York: Guilford Press.
- Tariq, V. N., Qualter, P., Roberts, S., Appleby, Y. and Barnes, L. (2013) Mathematical literacy in undergraduates: role of gender and emotional intelligence. *International Journal of Mathematical Education in Science and Technology*. i-First, doi: 10.1080/0020739X.2013.770087